DOCUMENT RESUME

ED 421 901 HE 031 421

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TITLE Re-engineering Four Years of College into Three: The Makings of a Competency-Based Three Year Bachelor's Degree.
SPONS AGENCY Fund for the Improvement of Postsecondary Education (ED), Washington, DC.
PUB DATE 1998-04-00
NOTE 103p.; Paper presented at the Annual Meeting of the American Educational Research Association (San Diego, CA, April 15, 1998).
PUB TYPE Reference Materials - Bibliographies (131) -- Reports - Descriptive (141) -- Speeches/Meeting Papers (150)
EDRS PRICE MF01/PC05 Plus Postage.
DESCRIPTORS *Acceleration (Education); Bachelors Degrees; *Business Administration Education; *Competency Based Education; *Curriculum Development; Educational Finance; Higher Education; Integrated Curriculum; Integrated Learning Systems; Interdisciplinary Approach; *Outcome Based Education; Paying for College; *Performance Based Assessment; Relevance (Education); Student Costs; Team Teaching; Work Study Programs

ABSTRACT

As part of an effort to reduce the costs of attending college, in 1996 New Hampshire College began developing a three-year bachelor's degree program in Business Administration with the goal of reengineering the existing four-year, eight-semester program into a competency- and outcomes-based, team-taught, cohort-based, interdisciplinary, and integrated academic program. The development team surveyed faculty in an attempt to reduce redundancy between courses, with the resulting program utilizing a modular design and intact student workgroup structure. Thirteen competencies, which measured outcomes, were also developed. Student academic experiences are reinforced by practical experience as employees and entrepreneurs. Yearly themes, such as "Student as Leader and Manager" or "Humanities and the Individual," are used to create additional cohesion to the academic experience. Due to the program's unique structure, students do not receive academic credit for a module until they meet the requisite competency levels. The appendices, which constitute more than half the document, include a definition of terms; a list of the 13 competencies; first-year modules and program themes; a computer technology module; the traditional Business Administration program; a comparison with competing educational paradigms; an annotated bibliography; survey data and analysis forms; a year-one competency reinforcement plan and course equivalent underlay; and a printout from the program's website. (MAB)

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ED 421 901

Re-engineering Four Years of College into Three: The Makings of a Competency-based Three Year Bachelor's Degree

American Educational Research Association
Annual Meeting 1998 - San Diego
Division J - Postsecondary Education
Session - Making Academic Programs Relevant: New Demands, New Initiatives

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> *Redesigning the curriculum to emphasize core competencies is undeniably difficult. Those who undertake such a challenge must be willing to put aside long-held beliefs about what a program must include, raise questions that traditionally have been avoided, and test assumptions about what students know and what curricula now achieve.* (Diamond, 1997)

I. Introduction: Three Year Bachelor's Degree in Business Administration

This paper describes the development of a three year, 6 semester, 120-credit bachelor's degree program in business administration. It involved the complete re-engineering of the existing traditional four year 8 semester degree program into a competency and outcomes based, team taught, cohort-based, inter-disciplinary and highly integrated academic program. This new program eschews traditional courses for flexible academic experiences called "modules" and promises equal or better learning outcomes than the four year program.

New Hampshire College was one of two colleges, out of over 2000 applicants, to receive a *Fund for the Improvement of Postsecondary Education* (FIPSE) grant to produce a three year undergraduate degree program to reduce the cost of going to college. A team of six faculty and professional staff chose business administration as the target program and conducted research that led to the creation of a set of thirteen competencies that students must master in order to

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attain their undergraduate degree. [**Appendix A** contains a glossary of terms. **Appendix B** lists the competencies.] This research led to the development of a set of highly interrelated educational experiences (modules) that support student competency development. [The Year One modules and their sequence schedule can be found in **Appendix C**.]

This curriculum development effort involved nearly the entire undergraduate college faculty and resulted in a three year curriculum designed to foster student mastery of these competencies. The first cohort of 15 students entered the program in September 1997 and, without any attrition, these students are now completing their second semester of study. A new and larger class of students is currently being accepted for admission in September 1998.

Competency development support is interdisciplinary and cross-curricular throughout the three-year curriculum. Major academic experiences are grouped together into modules that are then divided into 3-credit sub-modules. All are tied together with intra- and inter-module common threads. [See **Appendix D**.] The foundations for eleven of the thirteen competencies are laid in Year One. The first semester Year One modules provide the foundations for competencies which are then built upon and reinforced in second semester modules and throughout Years Two and Three. Students enter as a cohort and move together as a group through the entire 6 semester program where competencies are built upon and reinforced.

Student proficiency in the thirteen competencies are meant to be developed over the three years in all modules to some degree with the end result of complete student mastery of each competency. Competency development and reinforcement occur at varying levels of intensity in each academic experience and are planned and closely coordinated through a master planning document. [See **Appendix D**.] Progress assessment is a weekly activity. Students always know where they stand with respect to competence mastery.

Academic value has been *added* to the curriculum in a number of areas. Computer information technology is integrated into all curricular facets as a program requirement. An integrated "business partnership" adds practical value to the academic experience by matching students with organizations that are committed to supporting the academic program. Also, umbrella

academic themes bind business and liberal arts in each year. The Year One themes, "Humanities and the Individual" and "Student as Leader and Manager" are reinforced through a summer reading list, a variety of academic year activities and assignments.

A very high degree of instructional planning and implementation integration also adds value to the curriculum. Instructors not only team teach, but all work closely together on a regular basis to coordinate and integrate student learning experiences and activities. Faculty members whose particular modules have ended continue to be actively involved with the program by serving as "consultants" to the students and to current instructors throughout the academic year.

There are one-week long integrating experiences at the end of each of the six semesters that are intentionally designed to help students synthesize module material, reinforce knowledge and skills and to understand the relevance and relatedness of their learning experiences.

II. Characteristics & Mission of the Three Year Degree Program

New Hampshire College was founded in 1932 and is accredited by the New England Association of Schools and Colleges, the Association of Collegiate Business Schools and Programs, the New Hampshire Post-Secondary Education Commission, the New Hampshire State Department of Education for Teacher Certification and the American Culinary Federation Education Institute. The College offers Associate, Bachelor, Masters and Doctorate degrees. The Undergraduate School is divided into three divisions, Business, Liberal Arts, and Hospitality, which together offer 40 major areas of concentration leading to the bachelor's degree and 15 minors. All majors, including the Three Year Degree program, follow the traditional academic calendar of two fifteen-week semesters per academic year. [**Appendix E** shows the College mission, academic calendar, divisional structure, history and academic programs.]

The traditional four year Bachelor's of Science in Business Administration is an 8 semester degree program housed in the Business Division, while the Three Year Bachelor's of Science in Business Administration is a 6 semester program designed from the "ground up" as a custom three-year academic experience. The Three Year Degree program is <u>not</u> a "rescheduling" or a compression of the four year program. The development team used some of the distinctions that Barr and Tagg (1995) make between the "instruction" and "learning" paradigms as a guide in designing the new program. For example, instructors are considered primarily as "designers of learning methods and environments" rather than primarily as "lecturers." Also, the academic degree "equals demonstrated knowledge and skill" rather than "accumulated credit hours." [See **Appendix F** for the Barr & Tagg chart that compares these educational paradigms.]

The Three Year Degree program has these characteristics: students *actively* participate in the learning process; technology is *fully integrated* to facilitate and advance this learning process; mutually reinforced, *highly integrated and coordinated* educational experiences and activities are tightly woven throughout the curriculum; unnecessary *redundancy and overlap* in the curriculum are eliminated.

Additional characteristics include: close working relationships with for-profit and non-profit organizations that *complement* student learning in the classroom; students participate in *intact workgroups* both inside and outside of the classroom; academic experiences inside and outside of

the classroom are sequenced so that *foundations* for the competencies are acquired in a timely manner, and are reinforced, expanded and reflected in a multitude of innovative and diverse academic experiences, which include the business partnerships; a cohort-based program.

The program mission is described in Figure 1.

Figure 1

Three Year Degree Program Mission

The mission of the three-year baccalaureate program is to educate selected, qualified students who desire to major in Business Administration/Business Leadership. The program is designed so that students can:

a. ***Succeed*** in acquiring an entry-level position and advance in their chosen professions and careers.

b. ***Realize*** individual potential and contribute to the betterment of the local community and society at large.

c. ***Be*** effective leaders and proponents of change.

d. ***Become*** successful lifelong learners.

The college recognizes its obligation to deliver a high quality program that prepares students for a profoundly changing business, cultural and geopolitical environment so they have the best chance for personal and professional success and are equipped to provide effective leadership. To achieve this mission, students must work to accomplish certain academic competencies. The college must adopt the appropriate academic strategies and provide appropriate resources to ensure the success of the program. The new paradigm under which this program will operate thus recognizes the central role of the student, the faculty, and college administrators to work jointly to accomplish the academic mission.

III. Competency Determination

The development team of four faculty and two professional staff began their work in February 1996. They gathered numerous professional society curricular recommendations, studied related research, surveyed existing competency-based programs and sought ideas from faculty colleagues. This information was analyzed, synthesized and judgements were made. The process produced the thirteen competencies. [See **Appendix B**]. An annotated Bibliography of items that the team studied appears in **Appendix G**.

The team adopted this definition of "competency":

> A competency or skill is defined as "the ability to demonstrate a system or sequence of behavior that is functionally related to attaining a performance goal." (Boyatzis, 1982, p33).

Two works in particular influenced the team's thinking: "A faculty program of assessment for a college level competency-based communication core curriculum" (Aitken & Neer, 1992) identified 12 core curriculum competencies based upon extensive research. Also, from the beginning, the development team was committed to the incorporation of a significant liberal arts component into the business curriculum. "Exploring common ground in liberal and professional education" (Stark & Lowther, 1989) demonstrated how to integrate professional and liberal study in order to achieve commonly valued outcomes.

Although a number of accrediting associations were contacted, none had developed explicit competencies and only one had stated outcomes. See Figure 2.

Figure 2

Accrediting Associations Contacted

New England Association of Schools and Colleges (stated outcomes)
Accrediting Council on Education in Journalism and Mass Communications
American Assembly of Collegiate Schools of Business
Computing Sciences Accreditation Board
National Council for Accreditation of Teacher Education
Accreditation Council for Independent Colleges and Schools
Association of Collegiate Business Schools and Programs

With much study, analysis and discussion, the team developed 13 competencies that serve as the basis for the outcomes of the new program and at the same time satisfy the challenge to ensure that the students graduate as educated persons. All of this deliberation and analysis took place within the context of the existing 120 credit four year Business Administration Degree program where 27 credits constituted the major and the rest constituted the New Hampshire College and Business Division core credits, and Allied course credits. [**Appendix** E contains information on the College and courses in the program.]

In addition to these 13 competencies, the team constructed areas of competence/knowledge to be used in analyzing existing course content and which would be needed to build Three Year Degree program modules and outcome assessments. See Section IV.

IV. Analyses of Existing Courses

The goal was to redesign the existing four year 8 semester degree curriculum so that it could be offered in three years (6 semesters) cutting the cost of college by 25% without sacrificing learning outcomes. One way this could be done was to eliminate the unnecessary redundancies that existed in the established curriculum, while at the same time maintaining 120 credits of "coursework", and by streamlining the learning process. But first, the team had to understand what *topics and skills* were offered in each of the 40 courses that constituted the existing degree. Then: where they were *sequenced* in the program of study; whether these topics/skills were *introduced*, *reinforced* or were *foundational* (along with their level of emphasis) in a particular course; and under what general *competence/knowledge* categories they fell.

All existing courses in the college's traditional four-year Business Administration Degree program were given close scrutiny. [The four year Business Administration "Program Planning Sheet" is in **Appendix E** along with the College, Business Division and Business Administration course lists.] Note that 27 credit hours are needed to satisfy the major area, the College Core requires 48 credits, the Business core requires 24 credits and Allied courses constitute 21 credits. Faculty members who taught these forty 3-credit courses completed a comprehensive and detailed curricular survey. Many faculty members attended workshops to learn how to correctly respond to the survey.

The survey instrument was comprised of three data collection forms: [See **Appendix H**.]

A) Common Professional Component Course Analysis
B) Liberal Arts Component Analysis
C) General Education Competencies Analysis.

Each of these three forms contained multidimensional aspects:

D) "Course topics" rows, which the course instructors filled in, and
E) "Areas of competence/knowledge" columns, which are different for each of the three forms. The development team constructed these during the competency determination phase described in Section III of this paper.

In addition, each [D by E] cell in the instrument required two multidimensional responses:

F) Topic emphasis level (*high*, *moderate*, *low*) and
G) Levels of competence/knowledge (*initiating*, *foundational*, *reinforcement*).

The collected data were compiled into "Course Data Summary Sheets" and a comprehensive multidimensional meta-analysis helped to identify *what* and *where* unnecessary redundancies and overlaps existed. This meta-analysis also helped to identify *what* and *where* foundational material was, or was not, built upon in the existing four year Business Administration program. Example meta-analyses "grids" from each of the Common Professional, Liberal Arts and General Education Component Course Analysis forms are shown in **Appendix I**.

The results that were collected and summarized in the meta-analysis were utilized by the team, and by instructors recruited for the Three Year Degree program, to create and integrate modules in order to foster topic and competence mastery.

IV. Module Design and Integration

As a result of the above meta-analysis, college faculty totally reconstituted the curriculum into new academic experiences: modules and their accompanying 3-credit submodules. These modules cover all of the existing course topics without the unnecessary redundancies *and* are specifically designed to contribute to competency mastery. Each module and submodule are inextricably linked to all of the others. Mutually reinforcing intra-modular and inter-modular learning activities and cross-disciplinary coordination are module hallmarks. The modules and submodules for Year One are shown in **Appendix C**. Note that each submodule is equivalent to 3 academic credits.

An integral part of the curriculum is intact student workgroups that are active in and out of class. Outside of class, students work with actual businesses. Initially, students *learn* about business operations. Later in the program, groups work with business enterprises helping them to develop solutions to real problems. These particular non-credit business workgroup experiences are a value-added feature of the Three Year Degree program. See the "Labs and Field Trips" modules in **Appendix C**.

Year One modules are carefully sequenced to provide students with the foundations for the competencies in the first part of the year. Then, these competencies are built upon and reinforced in the latter part of Year One and throughout the second and third years. **Appendix J** shows a partial "Competency Reinforcement Plan" for Year One focussing upon the Computer Information Technology module. Notice how all of the submodules are explicitly linked to various competencies.

Provisions have been made for submodules in Year One to map directly into existing courses in the traditional four year program. This mapping facilitates ease of credit transfer should a student leave the Three Year Degree program in any of the two Year One semesters. See the partial example in **Appendix J** that focuses upon the Computer Information Technology submodules. There are ten 3-credit submodules in Year One that map directly into existing courses. The two weeks of Integrating Experience count as 3 credits. Public speaking is spread throughout Year One and thus corresponds to a public speaking 3 credit traditional course. Study skills and college life adjustment are spread throughout Year One. This corresponds to a freshman experience 3 credit traditional course. The three year student thus earns 39 credits in Year One.

An "Integrating Experience week" at the end of each semester affords students the opportunity to consolidate knowledge and skills and to learn even more through research and presentation. Together, these two integrating experience weeks constitute a total of 3 academic credits in each of the three years.

Competency development and reinforcement occur at varying levels of intensity in each of the modules and are coordinated and planned through a comprehensive Master Planning document. An example can be found in **Appendix D** for the Computer Information Technology - Advanced submodule. The module plan is divided into three parts: "Strategy", "Goals" and "Implementing Activities." Note that the implementing activities are designated by whether or not they are *foundational*, *reinforcing* and/or *pre-foundational*.

The yearly program themes are meant to add even more cohesion to the academic experience. These themes, "Student as Leader and Manager" and "Humanities and the Individual" in Year One, for example, help keep a common focus for the academic year and are addressed through guest lectures, module related readings, field trips, a summer "reading" list and other activities.

Modules are team taught, whenever possible, to enhance the educational experience for the students and to encourage interdisciplinary collaboration by participating faculty members. All instructors in the program are "hired" for the entire academic year even though their own module may constitute only a portion of the year. The idea is that all instructors comprise the "teaching team" and need to be available for students and for other instructors as consultants throughout the year. Teamwork is paramount. All instructors in the currently running modules physically meet on a weekly basis to review module and student progress and to coordinate instructional learning activities such as joint assignments and evaluations.

Students are continually evaluated in each of the modules and are thus able to know, on a weekly basis, where they stand with respect to module completion and competency mastery. Students who finish a module within the module time-frame but who have not mastered one or more competency levels, do not receive academic credit for the module until the competency level deficiency is remedied. Although total competency mastery is not expected until the end of Year Three, mastery at certain levels of each competency is expected throughout the three years.

V. Educational Communication and Delivery System: The Virtual Classroom

Because of the shortened time span of the new program, compared with the traditional four year program, and because of the focus on team teaching and student workgroups, a different kind of educational communication and delivery system was called for. While students still meet face-to-face as a cohort in classroom sessions, a modern World Wide Web-enabled computer-based communication system supports the cross-curricular and highly integrated nature of the modules and the entire program.

The notion of "classroom" has been greatly expanded by adopting a technological infrastructure that electronically connects students, teachers and business partners together over the college computer network and through the Internet. This communications infrastructure facilitates individual and group learning experiences inside and outside of the regular face-to-face classroom and helps to make possible the ongoing assessment of how students are doing with respect to competence mastery. One of the program's physical classrooms is completely wired for 30 networked ports connected to the campus network, the Internet and the World Wide Web. A state-of-the-art computer projection system is provided for classroom presentations along with a dedicated laser printer. All dormitory rooms are similarly connected to the network, as are many other campus locations.

All students and faculty members in the program are required to "own" network-ready laptop computers, which they can take with them anywhere on and off campus. Thus, students and faculty can be connected to and participate in the program's "virtual classroom" through the World Wide Web from anywhere in the world with an Internet connection.

The most basic component of this electronic delivery system is email with attachment capability. Here students and faculty can exchange private messages and transfer files with ease. Constant communication and access is crucial in such a tightly woven program. An asynchronous World Wide Web-enabled conferencing system permits students and faculty to publicly post ideas and assignments, hold threaded discussions and to make available just about any kind of electronic file (video, sound, HTML, spreadsheet, database, word processing, etc.). Web-based synchronous chat rooms are provided for student and instructor use.

These communication modalities facilitate the teamwork that is so crucial in this program of study. Student groups "meet" in cyberspace to work on projects outside of the physical classroom. Research, collaborative work on draft assignments, and the "publishing" (posting) of interim and finished products are facilitated by the virtual classroom collaborative tools available in the program. Currently, the program uses a set of tools provided by the College's Distance Education Program. Soon, the Three Year Degree program will begin utilizing a commercial software product, IBM-Lotus LearningSpace, which has full synchronous and asynchronous functionality including on-line testing modalities.

Students and participating faculty members receive intensive training in the use of the electronic communications and delivery system prior to the start of each academic year. For the students, this takes place prior to College freshman orientation week. Three Year Degree program students arrive on campus several days before the other freshman arrive for orientation. Program orientation activities, including "virtual classroom" training, are designed so that three year students have a chance to get to know one another, their professors and program expectations. These students then take part in all of the other regular freshman orientation activities so that they can be fully integrated into the freshman class.

VI. Higher Education Significance: New Demands and Innovations

This complete re-engineering of a four year undergraduate major involved the cooperation of most of the College faculty and the development of a number of novel curricular assessment tools and analysis techniques. The multidimensional three-form course assessment and the subsequent meta-analysis of the resulting data along multidimensional lines appear to be unique. This analysis gave valuable insights into the existing four year curriculum and exposed redundancies that could be judged as either necessary or unnecessary. This kind of understanding and clarity helped the team to design the academic experiences for the three year curriculum.

The high degree of academic coordination in the development of student competence mastery and module delivery required a significant re-orientation of traditional academic structure, culture and college politics. Departmental lines of demarcation as well as disciplinary walls were removed. For example, English professors and Computer Information Systems professors physically met each week, and in cyberspace on an almost daily basis, to discuss student progress, course content and to collaborate on shared assignments and exams.

The new Three Year Degree program class schedule did not mirror the rest of the College's course meeting times and thus required administrative and faculty scheduling adjustments. A different educational paradigm, "learning" as opposed to "instructional", and new computer communications tools had to be understood and assimilated into the pedagogical repertoire of participating faculty members.

The team had the challenge of educating faculty, professional staff and administrative colleagues about a radically different program of study housed within and utilizing the resources of a traditional institution of higher education. A number of public and private informational meetings were held on campus and numerous informational newsletters, team meeting minutes, and reports were distributed and posted on the College's Web site. [See the Three Year Degree Program Web site in **Appendix K**.]

The result of this 18 month intense developmental effort is that a select group of students reduce their time in college and their cost by 25%. At the same time they are promised to receive at least the same quality education as students in the traditional four year program.

This kind of non-compressed competency and outcomes based three year bachelor's degree program is unique in academe and just may be the harbinger of a fundamental change in the way undergraduate education is structured and delivered in the future.

> *Far-reaching curricular reform may appear overwhelming at first. But until we structure our curricula so that every student has the opportunity to learn and use core skills, and until we can confidently assert that we know how to measure each student's mastery of those skills, we will not give our students the background that they need for life beyond academe.* (Diamond, 1997)

This paper, along with all Appendices, can be viewed and downloaded from
http://www.nhc.edu/academic/gsb/seidman/

References

(**Appendix G** lists many books, articles, documents and Internet resources in the following categories: Assessment and Competency Based Education, Competency and Business, Continuous Quality Improvement, Modular Instruction, Technology and Learning.)

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APPENDIX A

Definition of Terms

Definition of Terms

COMPETENCY: A competency or skill is defined as "the ability to demonstrate a system or sequence of behavior that is functionally related to attaining a performance goal." (Boyatis, 1982, p33)

MODULE: One or more associated academic areas of study that can be logically grouped together or areas of lesser relatability that can be grouped under a theme to achieve the desired academic outcomes and/or competencies.

MODULAR SUB-COMPONENT: Credit-bearing academic experience similar to a traditional course.

CUSTOM-DESIGNED: A research-based program intentionally constructed to achieve the expected outcomes of the Bachelor's Degree in Business Administration and the stated 13 competencies in this program of study.

COMPETENCY-BASED: Program of study that is built upon the achievement of the 13 competencies.

VALUE-ADDED: Coordinating and integrating activities that are designed to enhance the value of the learning environment to include computer and information technology, business partnership program, yearly academic themes, inter-modular coordination within a semester, inter-modular coordination between semesters and inter-modular coordination between years, and semester ending integrating experience.

HIGHLY INTEGRATED: All instructors teaching modular sub-components each semester coordinate academic experiences, activities, themes, and competency-reinforcing implementing activities.

STUDENT CENTERED LEARNING: Instructor facilitates student learning and development as opposed to faculty member being the center of attention as a disseminator of facts.

CROSS-CURRICULAR COMPETENCY DEVELOPMENT: Refers to establishing a foundation for each competency in the first year and the reinforcement of those competencies in all appropriate modular sub-components during the three-year period.

BUSINESS PARTNERSHIPS: Local, regional and national businesses acting as host sites to provide progressively stimulating real-world experiences which complement the students' academic experiences.

INTEGRATING EXPERIENCE: Comprehensive academic experience that requires students to demonstrate skills, knowledge, and competency achievement from that semester and previous semesters. The integrating experience is both formative and cumulative over the three years.

APPENDIX B

The Competencies

THE COMPETENCIES

1. **Communication:** To master written, verbal, and electronic communication as well as reading comprehension that is appropriate for an entry level management position and for advancement thereafter.

2. **Computer and Information Technology:** To master and apply state-of-the-art computer/ information-based principles and business applications.

3. **Research:** To conduct primary and secondary research and understand, analyze, and interpret the results of the research.

4. **Problem Solving:** To conduct analytical and creative problem detection and problem solving.

5. **Organizational Leadership:** To understand how and be able to function as an effective team, group, and organizational leader.

6. **Group Membership:** To understand how and be able to function as an effective group and/or team member.

7. **Strategic Management:** To think, analyze, manage, and plan strategically.

8. **International Perspective:** To achieve a multi-disciplinary, global perspective in order to understand others and make more effective international business decisions.

9. **Interpersonal Skills:** To develop a broad range of interpersonal skills to use in multicultural and diverse work force settings.

10. **Business Directions:** To master the importance, significance, and meaning of business trends in their larger historical, political, economic, social, cultural, geopolitical, and technological contexts.

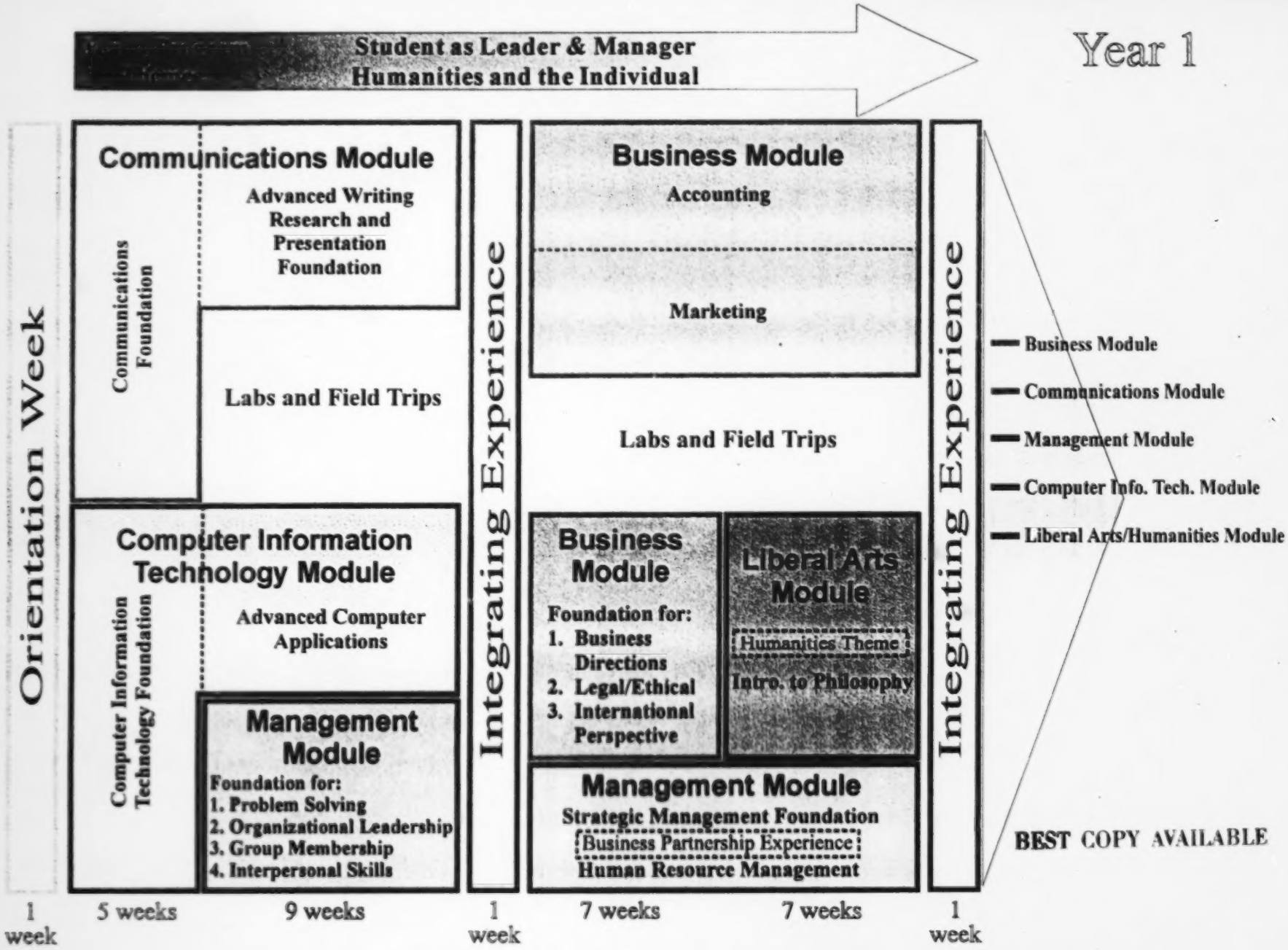
11. **Legal and Ethical Issues:** To understand the legal and ethical considerations and implications of personal, social, business and international business behavior and activities.

12. **Quantitative and Qualitative Analyses:** To understand and apply quantitative and qualitative methods of analysis as a basis for making business decisions.

13. **Humanities and Sciences:** To understand and appreciate how science, history, literature, and the arts impact society, politics, business, economics, culture, and technology trends.

APPENDIX C

Year One Modules
&
Program Themes



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A WALK THROUGH OF THE FIRST YEAR IN THE THREE-YEAR PROGRAM IN BUSINESS ADMINISTRATION

The purpose of this walk-through is to describe where we "want to get to" in the first year of the three-year degree program. The academic design includes the following:

1. **modular groupings of course equivalents,**
2. **laying of foundation for the competencies,**
3. **introduction, reinforcement, and development of all competencies,**
4. **central themes integrating content within modules, and**
5. **year-long, thematic integration of content across curriculum.**

The three-year program begins prior to students' arriving on campus. Students will receive suggested reading lists and selected materials regarding essential skills. The formal program begins with an on-campus orientation week before the start of classes.

First Semester

During the first 4.4 weeks of class, students focus on two modules, Communications and Computer Information Technology which, as part of larger academic components, lay the indispensable foundation for the written and computer competencies.

Each of the two modular components have intensive 40 class hours in 4.4 weeks introduce/strengthen critical learning skills which future modules will reinforce and develop.

During the next 8.6 weeks, students build on their foundation of research and presentation from the Communications module as they center their attention on the Management module which presents problem-solving interpersonal skills, group/team membership, and organizational leadership. The students continue their Computer module, learning concepts and applications.

Each of the three modular components meets 4 hours and 40 minutes a week. Students also participate in a non-credit lab/field trip block. The semester concludes with a one-week, 20 hour integrating experience.

Second Semester

During the first 4.4 weeks of the second semester, students focus on foundations for business directions: legal, ethical and international perspectives. These components are incorporated as follows:

- three 13-week modules, each meeting 3 hours and 45 minutes a week
- one intensive 4.4-week module, meeting 9 hours weekly

The total contact class time during the first 4.4 weeks of the second semester is 19 hours and 30 minutes each week.

During the remaining 8.6 weeks of the semester, students concentrate on laying a foundation for the strategic management competency with approximately 14 hours of their class time dedicated to three subject areas: **Accounting, Marketing, Behavioral Sciences.**

Students participate in the business partnership program and, as they did in the first semester, they take part in a non-credit lab/field trip block.

The semester concludes with a one-week, 20 hour integrating experience. Students will participate in examinations/evaluations during the fifteenth week of both semesters.

APPENDIX D

Module Academic Plan & Syllabus
Computer Information Technology - Advanced
Fall 1997

New Hampshire College
Three-Year Bachelor of Science Degree
in
Business Administration

Fall 1997 Modular Academic Plans

New Hampshire College • 2500 North River Road • Manchester, NH 03106
http://www.nhc.edu

NEW HAMPSHIRE COLLEGE

Computer Information Technology - Advanced (CIS195 3-Year)

Hospitality Administration & Culinary Arts Building (Rm. 201) *Three-Year Degree Program*
Mon., Tues, Friday (9:00am-10:45am) *Fall 1997*

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Thursday 2:00 - 4:30pm

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Thursday 1:00-2:30pm

VIRUTAL CLASSROOM WORKSPACE and CHATROOMS: http://www.dist-ed.nhc.edu/

MODULE PREREQUISITES: CIS100 3-Year

REQUIRED TEXTS:

(P) Parsons, J. & Oja, D. **Computer Technology & Society**. Course Technology Inc., Boston, 1997. [Selected Chapters]

(P) Parsons, J. & Oja, D. **Computer Concepts** (2nd Editon). Course Technology Inc., Boston, 1996. [Selected Chapters]

(O) Parsons, J. & Oja, D. **Microsoft Office 97 Professional** (New Perspective Series). Course Technology Inc., Boston, 1997.

Supplementary Readings and Handouts (TBA).

Note

Course Technology, Inc. maintains a student Online companion to the textbook. You can find it on the World Wide Web at: http://www2.coursetools.com/cti/concepts2/

MODULE DESCRIPTION:

This module goes well beyond the fundamental "computer literacy" component required for all New Hampshire College students. It is designed to promote a deeper and broader understanding of computer concepts and applications that support both academic and professional related requirements.

Topics include: The major components of both personal and mainframe computer systems in terms of both hardware and software; business information systems and computer application software; data structures, databases and data storage concepts/techniques; computer programming; network communications and the Internet; social, philosophical, ethical and economic implications of computers; computer center operations; and trends in the computer industry like artificial intelligence.

In addition, the student develops further computer-related proficiencies in support of his or her college studies. This is accomplished, in part, by the use of Microsoft Office 97.

MODULE OBJECTIVES:

This Computer Information Technology Module (which includes the CIS100 3-Year and CIS195 3-Year sub-modules) lays the conceptual and technological skills foundations required to master Competency #2.

Competency #2

"To master and apply state-of-the-art computer/information-based business applications."

Knowledge and skill mastery is commensurate with the needs of an entry-level management position in a Fortune 500 company.

(From the Three-Year Degree Program Strategic Plan).

Upon successful completion of CIS195 3-Year, the student should be able to:

1. **Achieve further knowledge and mastery of the concepts of** data representation and information theory; the hardware and architecture of a computer system; systems and applications software (including multimedia and educational software); telecommunications and networking infrastructure; Internet and Information Super Highway; data security and control; information technology careers; purchasing computers; computer files, databases and data storage devices in support of business operations; effective information systems in organizations; computer programming; artificial intelligence.

2. **Demonstrate advanced skill mastery in** computer word processing, graphical presentations, integration of word processing and graphical presentations, E-mail, asynchronous electronic discussion groups, synchronous electronic chat, Internet and World Wide Web navigation, database management systems, electronic spreadsheets. **Demonstrate skill mastery in** aspects of Web site construction.

3. **Achieve further knowledge and understanding of the concepts of** privacy and ethical issues; social, economic & philosophical implications of computers; historical and contemporary uses of computer information systems in business and other organizations; present and future impacts of computers on business and society at large.

This module supports the Three-Year Degree Program *Integrating Themes* of: "Student as Leader and Manager" and "Humanities and the Individual." This is accomplished by coordination of related assignments with other non-computer modules and through a series of videos, some of which are produced by PBS and Films for the Humanities and Sciences. In addition, this module supports Competencies 1,3,4,5,6,9,10, 11.

Computer Information Technology - Advanced (CIS195 3-Year)

MODULE SCHEDULE

[Dates/Instructor/Topics/Readings/Course Laboratories/Assignments]

	CIS195 3-Year	Computer Information Technology - Advanced	CIS195 3-Year	(M, T, Fri)	9:00 – 10:45 am
Class Date	**Instructor**	**Topic**	**Readings***	**Course Labs****	**Assignments*****
10/10 Fri	Dr. Seidman	Information Privacy Video 1	(P) Ch. PRV		Ch. PRV: Review Questions 6, 7 & 8. Project 6
10/13 M		No Class - Holiday			
10/14 T	Prof. Funk	Term Paper/PowerPoint Assignment Explained	Handout		
10/17 Fri	Dr. Seidman	Data Representation [Quiz]	(P) Ch. 9	Data Representation	Ch. 9: Q's 3, 9 & 10. Projects 8. All Data Rep. Lab Assignments
10/20 M	Dr. Seidman	Information Theory		TBA	TBA
10/21 T	Prof. Funk	Spreadsheet cases E 2.42 #3 E 2.43 #4	(O) p E.2.42		Fresh Air Portfolio / Portfolio 2
10/24 Fri	Dr. Seidman	Impact of Computers Video 5 [Quiz]	(P) Ch. LIF		Ch. LIF: Q's 5 & 7
10/27 M	Dr. Seidman	Communications Systems Infrastructure	(P) Ch. 10	Building a Network	Ch. 10: Q's 6, 8 & 9. All Building Network Lab Assignments
10/28 T	Prof. Funk, Guest Presenters	Intro to Financial Statements - Trial Balance / Worksheets	Handout		Trial Balance
10/31 Fri	Prof. Funk	Information Systems in Organizations [Quiz]	(P) Ch. 11 p.11-1 11-20	TBA	Ch. 11 Q's 3, 6, 10, 11, 12
11/3 M	TBA	"Triumph of the Nerds" Video 3	TBA		TBA
11/4 T	Prof. Funk	Querying a Database	(O) Access Tutorial 3		Valle Products
11/7 F	Prof. Funk	Developing Effective Information Systems [Quiz]	(P) Ch. 12	System Testing	Ch. 12: Q's 5, 6, 7

11/10 M	TBA	Computer Industry History and Cyberspace Videos 2 & 4	TBA		TBA
11/11 T	Prof. Funk	Forms & Reports	(O) Access Tutorial 4		Valle Products
11/14 Fri	Dr. Seidman	Managing Data in Files & Databases [Quiz]	(P) Ch. 13	SQL Queries	Ch. 13: Q's 4, 7 & 8. Projs 3 & 5. All SQL Lab Assignments
11/17 M	Dr. Seidman	Ethical Considerations in the Information Age Video 6	(P) Ch. IPE		Ch. IPE: Q's 7, 8 & 9. Projs 1 & 2
11/18 T	Prof. Funk	Integrating Microsoft Office	(O) Integration Tutorial 2		Eastern Regional Growers Conference
11/21 Fri	Prof. Funk	Computer Programming [Quiz]	(P) Ch. 14	Visual Programming	Ch. 14: Q's 4, 5, 6 & 7. Proj 4. All Visual Prog. Lab Assignments
11/24 M	Dr. Seidman	Programming Assignment	TBA		TBA
11/25 T	Prof. Funk	Object Oriented Programming-Smalltalk	TBA		
12/1 M	Dr. Seidman	World Wide Web Home Page/Site Development	TBA		TBA
12/2 T	Dr. Seidman	Artificial Intelligence Video 7	(P) Ch. AI (P) Ch 11 p. 11-21, 11-23		Ch. AI: Q's 1, 2 & 3. Projs 1, 2 & 3
12/5 Fri	Prof. Funk	Term Paper Presentations			
12/8 M	Dr. Seidman	Computer Concepts: Synthesis & Review	TBA		TBA
12/9 T	Prof. Funk	Term Paper Presentations			
12/12 Fri		FINAL EXAM			
12/15-12/19	TBA	Integrating Experience			

(P) refers to Parsons/Oja **Computers, Technology, & Society** and Parsons/Oja **Computer Concepts** (2nd Edition). (O) refers to **Office 97 Professional** book.

* Do prior to class session. ** Do prior to class session. Entails **Steps and Explore**. Course Lab Assignments are recommended (but are optional) unless explicitly assigned. *** Dr. Seidman's days: Assignments are due via email before the start of class. Professor Funk's days: Assignment due dates vary. To be discussed in class.

Computer Information Technology - Advanced (CIS195 3-Year)

WRITING COMPONENT

This module is specifically designed to support the New Hampshire College policy of requiring all students to expand their proficiency in expressing themselves in writing. Therefore, all written work is graded on **both** communication and technical proficiency. A word processor must be used to prepare all papers.

ASSIGNMENTS:

Readings: Students are expected to complete all text and supplementary reading assignments **prior** to the class meeting of the date that the assignment is due (see MODULE SCHEDULE). If absent from class, it is the student's responsibility to obtain any supplementary readings that were distributed or assigned.

Course Lab Assignments: Course Lab Assignments (P) should be completed **prior** to the class meeting of the date in which they are assigned

Homework: The *STANDING HOMEWORK ASSIGNMENT* is to complete the "Quick Check" exercises in each section that is assigned for reading in both of the Parsons (P) & (O) texts. While students need not submit these "Quick Checks", successful completion of them indicates probable understanding of the readings. Scheduled assignments are shown in the MODULE ASSIGNMENT SCHEDULE. Any additional homework will consist primarily of written assignments and computer assignments given in advance of their due-dates. If absent from class, it is the student's responsibility to obtain any additional assignments.

Budgeting Time. Students should expect to spend between 10-20 hours outside of class each week on readings, assignments and computer work.

EVALUATION:

Students are evaluated based on assignments and tests. Tests are designed to ensure that assignments are prepared and understood by the student.

Final Exam (Lab)	100 points
Final Exam (Class)	100 points
(O) Assignments	60 points
(P) Assignments	160 points
Quizzes (for week's assignments)	140 points
Term Paper/Presentation	100 points
TOTAL	660 points

Students can always tell how well they are doing by dividing their cumulative points for exams and assignments by the total points possible for each assignment as shown above. For example. Suppose a student earns 20 on Quiz #1 and 15 on Quiz #2. He or she would be doing B+ work in the module to this point [((20+15)/40)= 0.875].

The Instructors reserve the right to modify the grading structure to consider additional assignments, quizzes, the results of exams, attendance, or other factors deemed appropriate.

If student needs any special accommodations for exams, please let the Instructors know at least **two classes** prior to the exam.

Computer Information Technology - Advanced (CIS195 3-Year)

INSTRUCTORS' POLICIES

1. Students are encouraged to discuss assignments with classmates and to collaborate to a limited extent for educational purposes. However, all assignments must individual work. For group projects, all assignments must be that of the student and others in his or her group. Copying assignments is plagiarism, which is subject to course failure. The results of copying always show up on exams

2. Adhere to Assignment Due Dates. Grades for late assignments will be reduced by 10% of the value of the assignment for each day late. An assignment is considered "submitted" when the instructor receives it.

3. Three unexcused absences are cause for withdrawal from the module. Students have the obligation to contribute to the learning process by attending and being prepared for class, and by completing assignments on time.

4. Papers with egregious grammar and spelling errors will not be accepted. Use your grammar and spell checkers!

5. A student's grade is determined by the quality of his or her performance in the module. Grades are earned according to the following guidelines.

A = Outstanding	Work of distinctive quality not usually seen in other work. Shows **superior grasp** of module material and **initiative** on the part of the student. [A- = 90-93; A = 94-100]
B = Good	Work of **above average or superior quality** but less than outstanding. [B- = 80-82; B = 83-86; B+ = 87-89]
C = Average	Work of acceptable quality but without distinction. **Meets stated requirements**. [C- = 70-72; C = 73-76; C+ = 77-79]
D = Passing	Work of less than average quality but **meets minimum requirements**. [D = 60-64; D+ = 65-69]
F = Failing	Fails to meet **minimum requirements**.

DEPARTMENT POLICIES

The Computer Information Systems Department has identified three categories of cheating. The categories and action taken when cheating is encountered are:

1.	Theft	Fail module and refer to Dean of Students.
2.	Excessive Assistance	Regrade based on exams.
3.	Copying	**All** involved students fail the module.

THE COMPETENCIES*

1. **Communication:** To master written, verbal, and electronic communication as well as reading comprehension that is appropriate for an entry level management position and for advancement thereafter.

2. **Computer and Information Technology:** To master and apply state-of-the-art computer/information-based business applications.

3. **Research:** To conduct primary and secondary research and understand, analyze, and interpret the results of the research.

4. **Problem Solving:** To conduct analytical and creative problem detection and problem solving.

5. **Organizational Leadership:** To understand how and be able to function as an effective team, group, and organizational leader.

6. **Group Membership:** To understand how and be able to function as an effective group and/or team member.

7. **Strategic Management:** To think, analyze, manage, and plan strategically.

8. **International Perspective:** To achieve a multi-disciplinary, global perspective in order to understand others and make more effective international business decisions.

9. **Interpersonal Skills:** To develop a broad range of interpersonal skills to use in multicultural and diverse work force settings.

10. **Business Directions:** To master the importance, significance, and meaning of business trends in their larger historical, political, economical, social, cultural, geopolitical, and technological contexts.

11. **Legal and Ethical Issues:** To understand the legal and ethical considerations and implications of personal, social, business and international business behavior and activities.

12. **Quantitative and Qualitative Analyses:** To understand and apply quantitative and qualitative methods of analysis as a basis for making business decisions.

13. **Humanities and Sciences:** To understand and appreciate how science, history, literature, and the arts, impact society, politics, business, economics, culture, and technology trends.

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* From the Three-Year Degree Program Strategic Plan. The curriculum is designed so that all competencies are mastered by the end of the student's third year in the program.

Computer Information Technology - CIS195 3-Year

Videos

(These videos can be re-viewed at the AV Center)

Video 1: The World at Your Fingertips

"Americans live in the freest country on the planet, but we are also the most counted, recorded, questioned, dossiered, and filed; the same computers that free us to work, shop, play, and organize our lives also enable others to keep track of almost everything we do. This video looks at the social revolution wrought be computers, and at what price: the disappearance of place as an attribute; the loss of privacy; the pollution of information – and the transmission, sharing, and replication of polluted information; and the near-catastrophes that can occur when (as happened in the October 1987 stock market plunge) computer networks take on a life of their own."

Video 2: Inventing the Future

"Getting in on the ground floor of the computer industry was no picnic. This video chronicles the rough times experienced by the computer pioneers, until the industry took off and forever changed the way the world does business. The video covers the invention of programming languages, and the shifts, first to transistors, and later to integrated circuits, that made computers smaller and cheaper and ultimately led to personal computers."

Video 3: Triumph of the Nerds Series

Volume 1: "Bob Cringely, Silicon Valley and some spectacularly successful nerds. Intel. The Altair 8800 and the Homebrew Computer Club. Enter Paul Allen and Bill Gates. The West Coast Computer Faire and hippie culture collides with nerds and hobbyists. Steve Wozniak spawns Apple II. Steve Jobs, at 25, worth $100 million. The imminent arrival of IBM. Computer nerds impressing their friends."

Volume 2: "IBM's decision – 'buy not build' PC technology. The tiny software company named Microsoft. Culture shock – the suits meet the nerds. IBM PC hits the American business world. Clones invade the market, and Bill Gates sells to every clone maker. Microsoft and IBM co-operate, compete, and split. IBM launches OS/2 and Microsoft comes up with windows. Bill Gates wins again."

Volume 3: "Windows 95 – biggest global product launch ever for a 20-year old concept. Satellite links, rock 'n' roll and Jay Leno introducing Bill Gates, the richest man in the world. Xerox PARC – the user-friendly technology adopted by Steve Jobs for Macintosh. Jobs fired by the man he hired. Making PCs friendlier with Graphical User Interfaces. The Internet. Billionaire and millionaire nerds, triumphant!"

Video 4: The Paperback Computer

"Computers are called that because historically they were first used for numbers; but in fact they are all-purpose machines that can be turned to any purpose by being so instructed. This video shows how room-sized number crunchers evolved into desktop machines easy enough for a child to use, with less and less to do with arithmetic, cheaper than a TV set. No story would be complete without the Apple story, and this video covers the development of microprocessors, the trailblazing of Steve Jobs, Steve Wozniak, and Michael Markkula – and the arrival of a new generation for whom computers are the most basic form of communications."

Video 5: Cyberspace: Virtual Unreality

"The Information Age has been hailed as a quantum leap forward for humanity – an opportunity to finally achieve Marshall McLuhan's 'global' village' in which 'the medium is the message.' But what kinds of people are being created in cyberspace? While computer technology has changed virtually all aspects of life, critics argue that this technology is contributing to the growing social isolation of individuals. This video examines just what the implications of the new Information Age may be."

Video 6: Once Upon a Time in Cyberville

"This video takes a provocative look at the power and role of technology in our lives today, as well as what role it may play in the future. PC's, email, video games, interactive TV, electronic shopping malls, and the Internet are all an important part of 'Cyberville.' But are these advances moving us farther away from the real world outside our doors? Is technology and 'techno-lust' causing us to lose sight of who we are and where we came from? Instead of dealing with our growing societal problems, are we focusing on a future 'cyber-utopia'? This video explores advances in technology across a wide spectrum, as well as their implications for our society, economy, and culture." Many technology proponents and critics are featured in the video.

Video 7: The Thinking Machine

"Computers can calculate at mind-boggling speed. They can store, compare, predict, and juggle data. What they can't do – yet, anyway – is make sense of the plot of Dick and Jane stories. This video is devoted to artificial intelligence, and what computer scientists, psychologists, and philosophers have learned about human intelligence in the process of trying to teach computers to 'think.' 'What we are learning,' says Marvin Minsky, one of the pioneers of artificial intelligence at MIT, is that 'the things that people think are hard are actually quite easy, and the things that people think are easy are very hard.'"

Advanced Computer Applications
Academic Plan

Weeks 6 through 15

ACADEMIC PLAN COVER SHEET

THREE-YEAR BACHELOR OF SCIENCE IN BUSINESS ADMINISTRATION

MODULE:	**COMPUTER INFORMATION TECHNOLOGY (CIT)**
MODULAR SUB-COMPONENT:	**CIS 195, ADVANCED CIT**
PROGRAM YEAR:	**YEAR ONE, SEMESTER ONE, WEEKS 6-15**

1. INTRA SUB-COMPONENT LINKING THEMES:

    a. Student as computer tool user
    b. Student as contributing group/team member
    c. Student as competent and effective learner
    d. Student as "systems" thinker

2. INTRA MODULAR LINKING THEMES:

    a. Student as effective computer tool integrator
    b. Student as effective synthesizer of new ideas
    c. Student as competent and effective learner
    d. Student as "systems" thinker

3. INTER MODULAR LINKING THEMES FOR THE YEAR:

    a. Student as manager and leader
    b. Humanities and the individual
    c. Student as effective communicator and learner
    d. Student as effective problem-solver and informed critic

4. OTHER MODULAR SUB-COMPONENTS:

   a. Foundations of CIT

5. CONCURRENTLY RUNNING MSC'S:

   a. Writing, Research and Presentations (Semester 1, Weeks 8.6-15)
   b. Management Module (Semester 1, Weeks 8.6-15)

F = Items marked "F" refer to knowledge and skills which are foundational to the students in the module as indicated.

R = Items marked "R" refer to knowledge and skills which are reinforcing to the students in the module as indicated.

C = Activity contributes to the students' awareness of certain knowledge and skills prior to their foundational experience.

MODULAR SUB-COMPONENT ACADEMIC PLAN

MODULAR SUB-COMPONENT: Advanced Computer Information Technology

PROGRAM YEAR: Year One, Semester One, Weeks 8.6-15

I. STRATEGY:

a. To continue to develop understanding of basic computer and information technology concepts by laying the foundation in:

In-depth information theory & and data representation
Communications systems infrastructure and the World Wide Web
Development of effective information systems
Management of data in files and in databases
Computer programming languages
Computer programming
Cutting-edge concepts (artificial intelligence & expert systems)
Advanced thinking on the social, economic & philosophical implications of computers

These concepts are achieved by a combination of readings, computer simulation labs, guided exercises, independent lab work, class discussion and continued regular use. Group and individual hands-on exercises and projects are a major part of the learning experience. Thus, all learning activities involve a high degree of individual and group work.

b. To continue to develop the basic computer and information technology skills by laying the foundation in:

Problem solving with spreadsheets
Building business systems with database management systems
Integration of word processing, graphical presentation, spreadsheets and database management systems
Advanced asynchronous electronic discussion groups
Advanced synchronous electronic chat
Advanced Internet and World Wide Web navigation
World Wide Web Home page/site development

These skills are achieved by a combination of readings, computer simulation labs, guided exercises, independent lab work, class discussion and continued regular use. Group and individual hands-on exercises and projects are a major part of the learning experience. Thus, all learning activities involve a high degree of individual and group work.

2. GOALS: COMPUTER INFORMATION TECHNOLOGY-COMPETENCY #2

a. To further understand the fundamental concepts of information, communications and computers including information theory, computer hardware, and network and software fundamentals.

b. To have a deeper understanding of and be able to more aptly apply skills in word processing, presentation graphics and electronic communications (telnet, file transfer, E-mail, Internet: World Wide Web and distance learning technology).

c. To understand and be able to effectively use electronic spreadsheets and database management systems.

d. To further understand and more effectively use on-line, computer-based technology for business research.

e. To have a deeper understanding of the influence of computer information technology on society and the individual.

2. IMPLEMENTING ACTIVITIES: COMPUTER INFORMATION TECHNOLOGY-COMPETENCY #2

a. Continue to use a word processor and presentation graphics for all written and presentation forms of communication, including: the creation of a "desktop publishing" newsletter and the use of the spell-checker and grammar checker. Supports Projects #2 & #3 in Communications Writing, Research & Presentations MSC. Group and individual work.

C1-R This implementing activity is a reinforcement activity for Competency #1 (Communication)
C2-R This implementing activity is a reinforcement activity for Competency #2 (Computer and Information Technology)
C5-R This implementing activity is a reinforcement activity for Competency #5 (Organizational Leadership)
C6-R This implementing activity is a reinforcement activity for Competency #6 (Group Membership)
C9-R This implementing activity is a reinforcement activity for Competency #9 (Interpersonal Skills)

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C5-R This implementing activity is a reinforcement activity for Competency #5 (Organizational Leadership)
C6-R This implementing activity is a reinforcement activity for Competency #6 (Group Membership)
C9-R This implementing activity is a reinforcement activity for Competency #9 (Interpersonal Skills)

b. Continue to solve basic business problems including "what-if" analyses using electronic spreadsheets and produce five spreadsheet solutions to business cases. Coordinates with and supports the Management MSC running concurrently and the Accounting MSC which is forthcoming in Semester 2. Group and individual work.

C2-F This implementing activity is a foundational activity for Competency #2 (Computer and Information Technology)
C3-R This implementing activity is a reinforcement activity for Competency #3 (Research)
C4-R This implementing activity is a reinforcement activity for Competency #4 (Problem Solving)
C5-R This implementing activity is a reinforcement activity for Competency #5 (Organizational Leadership)
C6-R This implementing activity is a reinforcement activity for Competency #6 (Group Membership)
C9-R This implementing activity is a reinforcement activity for Competency #9 (Interpersonal Skills)
C12-R This implementing activity is a reinforcement activity for Competency #12 (Quantitative and Qualitative Analyses)

c. Set up two small-business computer systems to perform fundamental business functions using database management system software. Supports and coordinates with the Management MSC running concurrently and the Business Foundation MSC in Semester 2. Group and individual work.

C2-F This implementing activity is a foundational activity for Competency #2 (Computer and Information Technology)
C4-R This implementing activity is a reinforcement activity for Competency #4 (Problem Solving)
C5-R This implementing activity is a reinforcement activity for Competency #5 (Organizational Leadership)
C6-R This implementing activity is a reinforcement activity for Competency #6 (Group Membership)
C9-R This implementing activity is a reinforcement activity for Competency #9 (Interpersonal Skills)
C12-R This implementing activity is a reinforcement activity for Competency #12 (Quantitative and Qualitative Analyses)

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C4-R This implementing activity is a reinforcement activity for Competency #4 (Problem Solving)
C5-R This implementing activity is a reinforcement activity for Competency #5 (Organizational Leadership)
C6-R This implementing activity is a reinforcement activity for Competency #6 (Group Membership)
C9-R This implementing activity is a reinforcement activity for Competency #9 (Interpersonal Skills)
C12-R This implementing activity is a reinforcement activity for Competency #12 (Quantitative and Qualitative Analyses)

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C4-R This implementing activity is a reinforcement activity for Competency #4 (Problem Solving)
C5-R This implementing activity is a reinforcement activity for Competency #5 (Organizational Leadership)
C6-R This implementing activity is a reinforcement activity for Competency #6 (Group Membership)
C9-R This implementing activity is a reinforcement activity for Competency #9 (Interpersonal Skills)
C12-R This implementing activity is a reinforcement activity for Competency #12 (Quantitative and Qualitative Analyses)

d. Integrate activities (a) through (c) above to create multimedia documents containing text/spreadsheets/databases/graphics/sound/animation in at least one major project. Supports Projects #2 & #3 in Communications Writing, Research & Presentations MSC and work in the Management MSC, both running concurrently. Coordinates with the Accounting and Business Foundation MSC's, both in Semester 2. Group and individual work.

C1-R This implementing activity is a reinforcement activity for Competency #1 (Communication)

C2-R This implementing activity is a reinforcement activity for Competency #2 (Computer and Information Technology)

C4-R This implementing activity is a reinforcement activity for Competency #4 (Problem Solving)

C5-R This implementing activity is a reinforcement activity for Competency #5 (Organizational Leadership)

C6-R This implementing activity is a reinforcement activity for Competency #6 (Group Membership)

C9-R This implementing activity is a reinforcement activity for Competency #9 (Interpersonal Skills)

e. Continue to use electronic mail; upload and download files (ftp); zip and unzip files; telnet to other computers to use their facilities; subscribe and unsubscribe to E-mail lists and news groups in order to become an active participant in the Internet cyberworld community. Continue to demonstrate ability to effectively communicate electronically with classmates and with instructors.

C2-R This implementing activity is a reinforcement activity for Competency #2 (Computer and Information Technology)

f. Continue to participate in an electronic learning experience which includes using asynchronous discussion groups, synchronous chat and various electronic classroom activities. Students judged on form and on good writing criteria. Group and individual work.

C2-F This implementing activity is a foundational activity for Competency #2 (Computer and Information Technology)

C4-R This implementing activity is a reinforcement activity for Competency #4 (Problem Solving)

C5-R This implementing activity is a reinforcement activity for Competency #5 (Organizational Leadership)

C6-R This implementing activity is a reinforcement activity for Competency #6 (Group Membership)

C9-R This implementing activity is a reinforcement activity for Competency #9 (Interpersonal Skills)

g. Create their own Internet World Wide Web home page; publish on a three-year program web site. Supports Communications Writing, Research & Presentations MSC.

C1-R This implementing activity is a reinforcement activity for Competency #1 (Communication)

C2-R This implementing activity is a reinforcement activity for Competency #2 (Computer and Information Technology)

h. Continue to learn the fundamental concepts and basic principles of computers and computer-information technology in order to effectively adapt to and utilize technological advances. Read and understand pertinent material available in computer information technology magazines; determine specifications for the purchase of computer hardware and software. Labs, quizzes, written and network assignments.

C2-F This implementing activity is a foundational activity for Competency #2 (Computer and Information Technology)

C4-R This implementing activity is a reinforcement activity for Competency #4 (Problem Solving)

C12-R This implementing activity is a reinforcement activity for Competency #12 (Quantitative and Qualitative Analyses)

i. Continue to view videos pertaining to the Year One Integrating Themes: "Student as Manager" and "Humanities and the Individuals" as well as read text chapters such as: "The Impact of Computers on Your Life," "Computers, Intellectual Property, and Ethics," "Computers and Privacy," and "Can Computers Think?" Reviews and critical thought pieces expected from students.

C2-R-I This implementing activity is a reinforcement activity for Competency #2 (Computer and Information Technology)

C13-R This implementing activity is a reinforcement activity for Competency #13 (Humanities and Sciences)

j. Use the World Wide Web and electronic library resources to do research for required papers. A hypertext format research "paper" is required. Coordinated with Writing, Research and Presentations MSC that runs concurrently.

C1-F This implementing activity is a foundational activity for Competency #1 (Communication)

C2-F This implementing activity is a foundational activity for Competency #2 (Computer and Information Technology)

C3-R This implementing activity is a reinforcement activity for Competency #3 (Research)

k. Conduct a 15-minute class (supported by multimedia computer graphics) to explain an aspect of the leadership process.

C2-R This implementing activity is a reinforcement activity for Competency #2 (Computer and Information Technology)

C5-R This implementing activity is a reinforcement activity for Competency #5 (Organizational Leadership)

l. Engage in a series of problems, activities, and applications, using appropriate computer applications to achieve the supporting goals for Year One. Where possible, students will work as members of groups and present their solutions verbally and graphically to their peers.

C2-R This implementing activity is a reinforcement activity for Competency #2 (Computer and Information Technology)
C4-R This implementing activity is a reinforcement activity for Competency #4 (Problem Solving)
C12-R This implementing activity is a reinforcement activity for Competency #12 (Quantitative and Qualitative Analyses)

m. Use a word processor for all written forms of communication to include: the creation of a "desktop publishing" newsletter and the use of the spell-checker and grammar checker. The end product is a group newsletter. Other products include papers on video series. Supports Project #1 in Communications Foundation MSC and is the technical foundation for various aspects of the Writing, Research & Presentation MSC. Group and individual work.

C1-F&R This implementing activity is a foundational and reinforcement activity for Competency #1 (Communication)
C4-R This implementing activity is a reinforcement activity for Competency #4 (Problem Solving)
C5-R This implementing activity is a reinforcement activity for Competency #5 (Organizational Leadership)
C6-R This implementing activity is a reinforcement activity for Competency #6 (Group Membership)
C9-R This implementing activity is a reinforcement activity for Competency #9 (Interpersonal Skills)

n. Create effective class presentations using presentation graphics, spreadsheet and database management skills. Technical foundation for various aspects of Writing, Research & Presentation MSC. Numerous in-class presentations of knowledge and skills learned. Group and individual work.

C1-F&R This implementing activity is a foundational and reinforcement activity for Competency #1 (Communication)
C5-R This implementing activity is a reinforcement activity for Competency #5 (Organizational Leadership)
C6-R This implementing activity is a reinforcement activity for Competency #6 (Group Membership)
C9-R This implementing activity is a reinforcement activity for Competency #9 (Interpersonal Skills)

o. Learn the fundamental concepts and basic principles of computers and information technology in order to effectively adapt to and utilize technological advances. Read and understand pertinent material available in computer information technology magazines; determine specifications for the purchase of computer hardware and software. Also, computer-related ethics studied. Labs, quizzes, written and network assignments.

C1-F&R This implementing activity is a foundational and reinforcement activity for Competency #1 (Communication)
C11-C This implementing activity is a contributing activity for Competency #11 (Legal and Ethical Issues)

p. Use electronic mail; upload and download files (ftp); zip and unzip files; telnet to other computers to use their facilities; subscribe and unsubscribe to E-mail lists and newsgroups in order to become an active participant in the Internet cyberworld community. Demonstrate ability to effectively communicate electronically with classmates and instructors.

C1-F This implementing activity is a foundational activity for Competency #1 (Communication)

q. Create multimedia documents containing text/spreadsheets/databases/graphics/ sound/animation in at least one major project. Supports Projects #2 & #3 in Communications Writing, Research & Presentations MSC and work in the Management MSC, both running concurrently. Coordinates with the Accounting and Business Foundation MSC's, both in Semester 2. Group and individual work is expected.

C5-R This implementing activity is a reinforcement activity for Competency #5 (Organizational Leadership)
C6-R This implementing activity is a reinforcement activity for Competency #6 (Group Membership)
C9-R This implementing activity is a reinforcement activity for Competency #9 (Interpersonal Skills)
C10-C This implementing activity is a contributing activity for Competency #10 (Business Directions)

APPENDIX E

B.S. Business Administration (4-year) Program Sheet
&
New Hampshire College Course and Program Information

PROGRAM PLANNING SHEET

NEW HAMPSHIRE COLLEGE
B.S. BUSINESS ADMINISTRATION

YEAR 1997/1998

STUDENT'S NAME_____, _____, ____ ID#_____-____-_____
Last First M.I.

Campus_____ Prepared By_____ Date___/___/___ Approved By_____ Date___/___/___
Academic Advisor Initial Registrar's Office Initial (Transfer credits official only with Registrar's signature)

English Pretest Date ____/____/____ ☐Pass ☐Fail Math Pretest Date ____/____/____ ☐Pass ☐Fail

TRANSFER CREDITS FROM:

	#CREDITS:	FROM:	TO:
1._____	_____	_____	_____
2._____	_____	_____	_____
3._____	_____	_____	_____
4._____	_____	_____	_____

THE COLLEGE CORE

SUG YEAR	COURSE	TERM	GRADE	COURSE TITLE	PREREQUISITES	CREDIT	TCE
FR	ENG101	____	____	FUNDAMENTALS OF WRITING	NONE	<3>	____
FR	ENG120	____	____	COLLEGE COMPOSITION I	PRETEST OR ENG 101	3	____
FR	ENG121	____	____	COLLEGE COMPOSITION II	ENG 120	3	____
SO	ENG212	____	____	PUBLIC SPEAKING	ENG 120	3	____
SO	ECO201	____	____	MICROECONOMICS	NONE	3	____
SO	ECO202	____	____	MACROECONOMICS	NONE	3	____
				CHOOSE ONE:			
FR	PSY108			INTRO TO PSYCHOLOGY	NONE		
FR	SOC112	____	____	INTRO TO SOCIOLOGY	NONE	3	____
FR	GOV109			INTRO TO POLITICS	NONE		
FR	GOV110			AMERICAN POLITICS	NONE		
FR	MAT050	____	____	FUNDAMENTALS OF ALGEBRA	NONE	<3>	____
FR	MAT120	____	____	FINITE MATHEMATICS	ALGEBRA EQUIV., PRETEST or MAT050	3	____
SO	MAT220	____	____	STATISTICS	MAT120 MAT150	3	____
FR	CIS100	____	____	FUND CONCEPTS OF INFO & COMP TECH	NONE	3	____
				CHOOSE ONE:			
JR	FAS___			FINE ARTS ELECTIVE_____	_____		
JR	HUM___	____	____	HUMANITIES ELECTIVE_____	_____	3	____
JR	HIS___	____	____	HISTORY ELECTIVE_____	_____	3	____
JR	ENG___	____	____	LITERATURE ELECTIVE_____	_____	3	____
JR	SCI___	____	____	SCIENCE ELECTIVE_____	_____	3	____
JR	PHL___	____	____	PHILOSOPHY ELECTIVE_____	_____	3	____
FR	_____	____	____	SOCIAL SCIENCE ELECT(ATH,GOV,PSY,SOC,GEO)_____		3	____
FR	FEX100	____	____	FRESHMAN EXPERIENCE	NONE	3	____

THE BUSINESS CORE

SO	ACC101	____	____	INTRO ACCOUNTING & FINANCIAL REPORTING I	NONE	3	____
SO	ACC102	____	____	INTRO ACCOUNTING & FINANCIAL REPORTING II	ACC 101	3	____
FR	ADB125	____	____	HUMAN RELATIONS IN ADMINISTRATION	NONE	3	____
SO	ADB206	____	____	BUSINESS LAW I	NONE	3	____
SO	CIS200	____	____	INFORMATION SYSTEMS CONCEPTS	CIS 100	3	____
JR	FIN320	____	____	INTRODUCTION TO BUSINESS FINANCE	ECO201,ECO 202,MAT120	3	____
SO	MKT113	____	____	INTRODUCTION TO MARKETING	NONE	3	____
SR	ADB421	____	____	STRATEGIC MANAGEMENT & POLICY	ACC102,MKT113,FIN320	3	____

MAJOR REQUIREMENTS

FR	ADB110	____	____	INTRODUCTION TO BUSINESS	NONE	3	____
JR	ADB211	____	____	HUMAN RESOURCE MANAGEMENT	NONE	3	____
SO	ADB215	____	____	PRINCIPLES OF MANAGEMENT	NONE	3	____
JR	ADB326	____	____	SOCIAL ENVIRONMENT OF BUSINESS	NONE	3	____
JR	ADB331	____	____	INTRODUCTION TO OPERATIONS MGT	ECO201,ACC102,MAT220	3	____
SR	ADB342	____	____	ORGANIZATIONAL BEHAVIOR	ADB 125	3	____
SR	INT___	____	____	INTERNATIONAL BUS ELECT (300 OR 400 LEVEL)	_____	3	____
SR	ADB___	____	____	ADB ELECTIVE(300 OR 400 LEVEL)	_____	3	____
SR	ADB___	____	____	ADB ELECTIVE(300 OR 400 LEVEL)	_____	3	____

ALLIED COURSES

SR	ECO301	____	____	MANAGERIAL ECONOMICS	ECO201,ECO202,ACC102,MAT220	3	____
FR	MAT121	____	____	MATHEMATICAL CONCEPTS & TECHNIQUES	MAT 120	3	____

FREE ELECTIVES

SR	_____	____	____	FREE ELECTIVE OR COOP WORK EXPERIENCE_____	_____	3	____
SR	_____	____	____	FREE ELECTIVE OR COOP WORK EXPERIENCE_____	_____	3	____
SR	_____	____	____	FREE ELECTIVE OR COOP WORK EXPERIENCE_____	_____	3	____
SR	_____	____	____	FREE ELECTIVE OR COOP WORK EXPERIENCE_____	_____	3	____
SR	_____	____	____	FREE ELECTIVE _____	_____	3	____

NOTE: MINIMUM NEEDED FOR GRADUATION: 120 CREDITS 126

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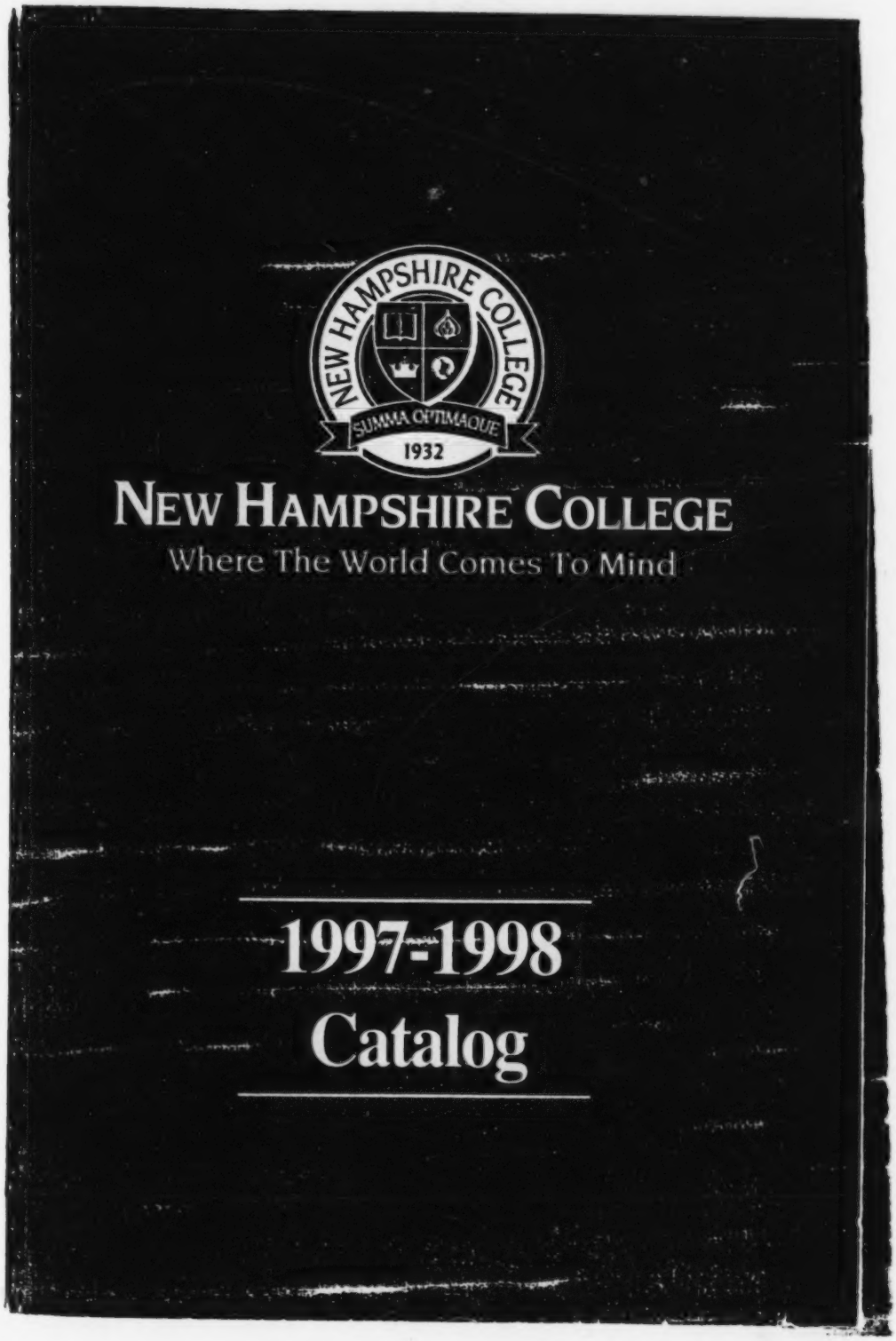

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Academic Calendar Undergraduate Day School 1997-1998

Fall	
Returning Student Check-in	September 2
Staff Meeting Day	September 2
Classes Begin	September 3
Mid-Term Holiday	October 13
Thanksgiving Recess	November 26-28
Classes Resume	December 1
Last Class Day	December 11
Reading Day	December 12
Final Exams	(excluding Sunday) December 13-18
Intersession	December 29-31 and January 2-9 (excluding Sunday)
Spring	
Returning Student Check-in	January 12
Staff Development Day	January 12
Classes Begin	January 13
Mid-Term Holiday	March 2-6
Classes Resume	March 9
Last Class Day	April 29
Reading Day	April 30
Final Exams	(excluding Sunday) May 1-6
Graduation	May 9

Academic Calendar Undergraduate Day School 1998-1999

Fall	
Returning Student Check-in	September 8
Staff Meeting Day	September 8
Classes Begin	September 9
Last Day to Drop/Add a Class	September 15
Mid-Term Holiday (Columbus Day Observed)	October 12
Last Day for Student Withdrawal from Class	November 11
Thanksgiving Recess	November 25-27
Classes Resume	November 30
Last Class Day	December 17
Final Exams	(includes Sunday) December 18-22
Intersession	(includes Sunday) December 28-31 (excluding Sunday) January 4-9
Spring	
Returning Student Check-In	January 11
Staff Meeting/Development Day	January 11
Classes Begin	January 12
Last Day to Drop/Add a Class	January 18
Mid-Term Holiday	March 1-5
Classes Resume	March 8
Last Day for Student Withdrawal from Class	March 23
Last Class Day	April 28
Reading Day	April 29
Final Exams	(excluding Sunday) April 30-May 5
Graduation	May 8

New Hampshire College

Mission

New Hampshire College provides its graduates with the intellectual and social foundations which prepare them to lead fulfilling lives as competent, committed and compassionate members of a global society. As an institution dedicated to teaching, New Hampshire College is accessible, innovative and offers challenging educational experiences of high quality.

New Hampshire College is a private, independent institution dedicated to teaching undergraduate and graduate academic programs of high quality and to giving personal support to its students. The college develops instructional programs which blend theory with practice, thus preparing graduates for personal growth and professional development.

Whether in business, liberal arts, teacher education, hospitality or related disciplines, the college is committed to the education of the whole person in a caring, challenging and friendly environment. So that its students may make positive contributions to society, the college acknowledges the importance of intellectual, professional and ethical development, community service, cultural involvement and social responsibility.

The college fosters learning partnerships among students, faculty and staff. Students become actively involved in the learning process which encompasses opportunities for community service and work experience. The college faculty includes individuals who bring practical, professional experience to the learning environment.

The college offers a diverse living and learning environment that reflects many ages, races and cultures. The multi-cultural, multi-national community promotes mutual respect and understanding of others as an integral part of its globally-oriented educational purpose.

New Hampshire College leads in the development of educational programs and services which reflect the changing demands and needs of students and society, thus enabling graduates to compete in the global economy.

Goals of the Undergraduate School

Instructors, students and administrators in the undergraduate school recognize and subscribe to the mission of the college. In addition, the undergraduate school has the following specific, supporting goals:

- Present a quality education that enables students to enter the professional world, or that enables those already established to enhance, advance or change their careers.

- Research and teach important truths, principles, ideas, facts and performance methods, so that students can make significant contributions to their chosen fields.
- While providing a challenging course of studies, encourage students to become life-long learners, critical thinkers, and problem solvers, so that they can adapt creatively and appropriately to all situations, whether structured or unstructured.
- Help students to understand themselves, society and different cultures, so that they can participate in the changing world around them.
- Encourage students to identify the personal qualities and ideals which will enable them to function ethically and responsibly in all areas of society.
- Ensure that all students learn to speak and write clearly and accurately, use computers efficiently, and use libraries effectively.

To meet these goals, the faculty is committed to the art of teaching and strives to stimulate critical thought and inquiry in the classroom. Although teaching is primary at New Hampshire College, the living-learning environment that exists given the undergraduate school's significant international student body provides the basis for intercultural and affective development of its students.

A Teaching Institution

For all its apparent diversity and educational pluralism, a single, strong and unbroken theme runs throughout the entire college, linking its schools, institutes and programs: New Hampshire College is first and foremost an institution committed to teaching.

At New Hampshire College, the student and the students' needs to learn, to grow, and to experience that exhilarating sense of competence and commitment that always accompany mastery are the foundations upon which the educational adventure is based and assumes its meaning. This reality, above all others, is what the college is all about, and it is this reality which has enabled the college to self-consciously define itself as an educational community in which creative teaching is the most important and wondrous of all activities.

As a teaching institution, New Hampshire College takes seriously the fact that not only do we learn in different ways, but that learning occurs both inside and outside of the classroom, and can take place only if an individual successfully integrates the intellectual, social and emotional aspects of his or her development.

Commitment to Intercultural and International Education

The world has become a "global village" where events, corporations and other institutions transcend national boundaries. Higher education must reflect the interdependence of this world and recognize that its graduates will be world citizens whose careers will influence and be influenced by people, organizations and cultures beyond their countries' borders.

New Hampshire College prepares its students to live in this increasingly complex world of diverse beliefs, ideologies and values. It has moved into the forefront of educational efforts to increase the exchange of ideas and experiences between the United States and other countries.

New Hampshire College hosts students from 70 countries. From Thailand to Kenya, from Colombia to Denmark, from Turkey to Japan, its student body reflects the diversity of our world. The mix of foreign and domestic students has created a climate rich with opportunity for cross-cultural dialogue and exchange. The benefits of international and intercultural exchange do not show up in grades or grade point averages; they manifest themselves in the understanding developing from the experience of learning with people from other cultures and in the network developed by alumni around the world.

New Hampshire College's commitment to educational exchange is exemplified in the following areas:

Certificate and Degree Programs
- The Graduate Certificate in International Business;
- The M.S. in International Community Economic Development;
- The Bachelor of Applied Science in Hospitality Administration, an international training program;
- The M.S. and B.S. programs in International Business;

Support Programs
- The American Language and Culture Center;
- The Center for International Exchange;

Exchange and Foreign Programs
- Work exchange trainee programs with Fanshawe College and other Canadian and overseas institutions;
- Exchange student agreements with the University of North London and the University of Glamorgan;
- Participation in the Quebec/New England Exchange Program;
- Articulation agreements and cooperative relationships with foreign educational institutions.

New Hampshire College will continue to support and to recognize members of its community who strive to support its goals in international educational exchange.

History of the College

New Hampshire College was founded in 1932 by H.A.B. Shapiro as the New Hampshire School of Accounting and Secretarial Science. The school remained relatively small until 1961 when it was incorporated and renamed New Hampshire College of Accounting and Commerce.

In 1963 the state of New Hampshire granted the college its charter which gave it degree-granting authority. That same year the first associate's degrees were awarded and three years later the first bachelor's degrees were conferred.

The college became a non-profit institution under a board of trustees in September, 1968. In 1969 the name was shortened to New Hampshire College. In 1971 the college moved from its downtown Manchester site to a new 200 acre campus on the Merrimack River, and during 1974 the college introduced a master of business administration program. In 1978 the college assumed the degree programs in human services originally started by Franconia College. These two programs were later organized into the Graduate School of Business and the School of Human Services.

During the Spring of 1981 the General Court of New Hampshire authorized New Hampshire College to award the master of human services degree and the master of science degree in business-related subjects. That same year, to accommodate the two new rapidly expanding programs, the college purchased the former Mount Saint Mary College in Hooksett, just under five miles from the south campus.

In 1983 the college established the Culinary Institute which offers a two-year degree program to prepare students for career opportunities in the hospitality field.

In 1988 the School of Human Services was transferred to Springfield College in Springfield, Massachusetts. In 1992, new liberal arts and teacher education majors were added to the undergraduate school.

This past year was a period of growth on the New Hampshire College campus. Four new buildings, a residence hall, and new homes for the graduate school of business, the hospitality administration programs and the American Language and Learning Center, the Center for International Exchange and public safety, were completed. All of the college's operations formerly located at the north campus have been moved to the main campus.

In 1996 the graduate school received authority to offer doctoral programs in international business and community economic development, with the first classes offered in the fall of 1997.

Over the years New Hampshire College has extended its academic programs to off-campus locations to better serve adult learners. Currently programs are being offered in Concord, Laconia, Manchester, Nashua, Portsmouth and Salem, NH, Brunswick, Maine, and Roosevelt Roads, Puerto Rico.

New Hampshire College now has a day college enrollment of nearly 1,000 students, 1,500 in the graduate school of business, and nearly 4,000 in the division of continuing education. In recent years international student enrollment has enriched the cultural diversity of the college.

Today, New Hampshire College offers associate's degrees in culinary arts and several business-related fields as well as in an inter-disciplinary liberal arts program. In addition to bachelor of science degrees in sixteen areas of business and

professional preparation, the college also offers bachelor of arts degree programs in communication, English language and literature, humanities, psychology and social science as well as the pre-law program. A three-year bachelor of science degree program in business administration was launched in September 1997.

The graduate school of business offers master's degree programs in business administration, accounting, business education, computer information systems, community economic development and international business.

Accreditation and Membership

Accredited by:

- New England Association of Schools and Colleges, Inc., which accredits schools and colleges in the six New England states. Accreditation by the association indicates that the institution has been carefully evaluated and found to meet the standards agreed upon by qualified educators.
- Association of Collegiate Business Schools and Programs (ACBSP).
- The New Hampshire Post-Secondary Education Commission.
- The New Hampshire State Department of Education for Teacher Certification.
- American Culinary Federation Education Institute

New Hampshire College supports the efforts of secondary school officials and governing bodies to have their schools achieve regional accredited status to provide reliable assurance of the quality of the educational preparation of its applicants for admission.

New Hampshire College is also:

- Approved for the education of veterans and the children of veterans.
- Approved for the rehabilitation training of disabled students.
- Listed in the Department of Education's Education Directory, Part 3, Higher Education.

Campus

The campus is located in the Manchester/Hooksett area of southern New Hampshire. Manchester, known as the Queen City, has a growing population of 100,000 and is hub to a wheel of progress with industrial and business growth to its south, and vacation and tourist areas to its north. Convenient interstate highways bisect Manchester's bustling perimeters; air service connects Manchester to all major cities in the United States. New Hampshire College's campus borders Interstate 93 and is within an hour of Boston.

Campus facilities include 280 acres with twenty-four major buildings: classroom/administrative buildings, residence halls, a computer center, a library complex with a TV studio, a student center with dining facilities and an athletic/recreational complex featuring two gymnasiums, a competition-size swimming pool, a hockey rink, athletic fields and lighted tennis courts.

Academic Programs

Undergraduate School

The undergraduate school, under the leadership of its faculty and dean, prepares its students by offering the following major courses of study leading to the bachelor's degree:

- Accounting
- American Studies
- Business Administration
- Business Administration - Three Year Degree Program
- Business Studies (with concentrations in:)
  - Accounting
  - Aviation Management
  - Business Administration
  - Business Finance
  - Computer Information Systems
  - Healthcare Management
  - Human Resource Management
  - International Business
  - Marketing
  - Materials Management
  - Production and Inventory Control
  - Restaurant Management
  - Small Business Management
  - Sport Management
- Communication
- Computer Information Systems
- Economics
- Economics/Finance
- English Language and Literature
- Hospitality Administration (Applied Science)
- Hotel Management
- Humanities
- International Business
- Management Advisory Services
- Marketing
- Psychology
- Restaurant Management
- Retailing
- Social Science
- Sport Management
- Teacher Certification Programs
  - Business
  - English
  - Marketing
- Technical Management
- Travel and Tourism

Minors:

- Accounting
- Advertising
- Business for Liberal Arts
- Business/Marketing Teacher Education
- Communication
- Computer Information Systems
- Economics
- English Language and Literature
- Finance
- History
- Hotel Management
- Marketing
- Psychology
- Restaurant Management
- Sociology

Associate's Degree Programs

In addition to its range of four-year bachelor's degree majors, New Hampshire College offers two-year associate in arts and associate in science and applied science degree programs, which may be a solution for those not sure about going on to college for four years. A two-year program offers solid preparation for a job in addition to the opportunity to continue on to a bachelor's degree. The college offers the following seven associate degree programs:

- Accounting
- Business Administration
- Computer Information Systems
- Culinary Arts (Applied Science)
- Liberal Arts
- Marketing
- Retailing/Fashion Merchandising

Certificate Programs

- Accounting
- Aviation
- Computer Programming
- Education and the Family
- Healthcare (with options in:)
  - Accounting
  - Administration
  - Computer Information Systems
  - Human Resources
- Human Resource Management
- Microcomputer
- Production and Inventory Control
- Retailing

Academic Programs

The Undergraduate Curriculum

The undergraduate school believes that success requires that students receive a broad preparation in liberal arts, and intense practice in oral and written communication.

As part of its recognition that successful leaders be able to view problems from a variety of perspectives, the undergraduate school mandates that all students complete courses in writing, arts and humanities, social sciences, mathematics and science, public speaking and the freshman seminar. Students may choose to add additional breadth to their preparation by enrolling in more advanced general education courses as part of their free elective credits.

ENG 101 (Fundamentals of Writing) may be a requirement for some students, in addition to the 48 credits listed below.

All students who must begin the English sequence with ENG 101 should review with their advisor how that course will fit into their academic year.

The College Core			Credits
ENG	120	College Composition I	3
ENG	121	College Composition II	3
ENG	212	Public Speaking	3
ECO	201	Microeconomics	3
ECO	202	Macroeconomics	3
PSY	108	Introduction to Psychology	
		or	
SOC	112	Introduction to Sociology	
		or	
GOV	109	Introduction to Politics	
		or	
GOV	110	American Politics	3
MAT	120	Finite Mathematics	3
MAT	220	Statistics	3
CIS	100	Introduction to Computer Technology and Microcomputer Applications	3
FAS		Fine Arts Elective	
		or	
HUM		Humanities Elective	3
HIS		History Elective	3
LIT		Literature Elective*	3
SCI		Science Elective	3
PHL		Philosophy Elective	3
		Elective (ATH, GOV, PSY, SOC, or GEO)	3
FEX	100	Freshman Experience Seminar	3
		Total Credits:	48

*Literature Electives are fulfilled by ENG 200-level courses and above. This does not include ENG 212, ENG 220, ENG 330, ENG 333, and ENG 435.

Division Cores

Each division of the undergraduate school sets out a series of courses required in that division. Business majors take the business core, liberal arts majors the liberal arts core, and hospitality majors the hospitality core. Students who complete their program of study with the business, hospitality and business teacher education core receive a bachelor of science (B.S.) degree. Those who complete their program with the liberal arts core receive a bachelor of arts (B.A.) degree.

Major Courses

Each college program requires that students select a specific related major with up to 33 credits in that major. The record of the college alumni's success in specialized areas results in major course offerings that provide students the knowledge and skills to enter focused careers upon graduation. Some of the major credits may be designated for a cooperative education experience. The credit-bearing cooperative education program allows students to apply theory and practice the skills learned in the classroom in an actual experience.

Allied Courses and Free Electives

Each bachelor's degree student will have an opportunity to select free electives that students and their advisors believe best meet students' individual needs. Some students may select courses that would comprise a minor area of studies, while others may use a part of their elective credits to complete a cooperative experience. Still others may opt for additional advanced courses in areas of business or the liberal arts. In some majors there are allied courses outside of the major area that students are required to take in order to give them a stronger preparation for their chosen careers.

Division of Business

Business Division Chair: Associate Professor John C. VanSantvoord

The Business Core

The following courses comprise the basic business education that the college believes essential in providing students with a solid foundation for business careers. Students in each bachelor of science degree business program will add to these core courses, major courses, allied courses, and free electives that will match their career goals.

Business Core			Credits
ACC	101	Introduction to Accounting and Financial Reporting I	3
ACC	102	Introduction to Accounting and Financial Reporting II	3
ADB	125	Human Relations in Administration	3
ADB	206	Business Law I	3
ADB	421	Strategic Management and Policy	3
CIS	200	Introduction to Information Systems	3
FIN	320	Introduction to Business Finance	3
MKT	113	Introduction to Marketing	3
		Total Credits:	24

Business Administration Programs
Coordinator: Assistant Professor Martin J. Bradley

Business Administration

The past two decades have witnessed unparalleled change in business, industry and society. Emerging trends suggest that change is going to continue to be rapid, at times unpredictable and frequently disruptive.

As business and society grow more complex, the demand for trained managers and leaders has increased. Managers can no longer make business decisions based on hunches and guesses or look for old solutions to solve new problems.

Students in the business administration program will learn how to be leaders and managers in this ever-changing and hectic business environment.

Students in the business administration program will learn how to be leaders and managers in this ever-changing and hectic business environment.

New Hampshire College's business administration major has its emphasis on leadership, communication, accounting, behavioral dynamics and quantitative analysis. These business and management skills, when complemented with a solid foundation provided by the college core enable students to obtain the knowledge and skills necessary to be a complete manager.

Business Administration Curriculum - Bachelor of Science – 4 Year

			Credits
College Core			48
Business Core			24
Major Courses			
ADB	110	Introduction to Business	3
ADB	211	Human Resource Management	3
ADB	215	Principles of Management	3
ADB	326	Social Environment of Business	3
ADB	331	Introduction to Operations Management	3
ADB	342	Organizational Behavior	3
ADB		Business Electives (300/400 level)	6
INT		International Elective (300/400 level)	3
		Total Major Credits:	27
Allied Courses:			
ECO	301	Managerial Economics	3
MAT	121	Mathematical Concepts and Techniques for Business	3
		Total Allied Credits:	6
		Free Electives	15
		Total Credits:	120

Note: Students who select the business administration with cooperative education program must use free electives to satisfy cooperative education requirements.

APPENDIX F

Comparing Educational Paradigms

Barr, R.B., & Tagg, J. (1995, Nov./Dec.). From teaching to learning: a new paradigm for undergraduate education. Change, 13-25.

Chart I
Comparing Educational Paradigms

The Instruction Paradigm	The Learning Paradigm
Mission and Purposes	
• Provide/deliver instruction	• Produce learning
• Transfer knowledge from faculty to students	• Elicit student discovery and construction of knowledge
• Offer courses and programs	• Create powerful learning environments
• Improve the quality of instruction	• Improve the quality of learning
• Achieve access for diverse students	• Achieve success for diverse students
Criteria for Success	
• Inputs, resources	• Learning and student-success outcomes
• Quality of entering students	• Quality of exiting students
• Curriculum development, expansion	• Learning technologies development, expansion
• Quantity and quality of resources	• Quantity and quality of outcomes
• Enrollment, revenue growth	• Aggregate learning growth, efficiency
• Quality of faculty, instruction	• Quality of students, learning
Teaching/Learning Structures	
• Atomistic; parts prior to whole	• Holistic; whole prior to parts
• Time held constant, learning varies	• Learning held constant, time varies
• 50-minute lecture, 3-unit course	• Learning environments
• Classes start/end at same time	• Environment ready when student is
• One teacher, one classroom	• Whatever learning experience works
• Independent disciplines, departments	• Cross discipline/department collaboration
• Covering material	• Specified learning results
• End-of-course assessment	• Pre/during/post assessments
• Grading within classes by instructors	• External evaluation of learning
• Private assessment	• Public assessment
• Degree equals accumulated credit hours	• Degree equals demonstrated knowledge and skill

Barr, R.B., & Tagg, J. (1995, Nov./Dec.). From teaching to learning: a new paradigm for undergraduate education. Change, 13-25.

The Instruction Paradigm	The Learning Paradigm
Learning Theory	
• Knowledge exists "out there"	• Knowledge exists in each person's mind and is shaped by individual experience
• Knowledge comes in "chunks" and "bits" delivered by instructors	• Knowledge is constructed, created, and "gotten"
• Learning is cumulative and linear	• Learning is a nesting and interacting of frameworks
• Fits the storehouse of knowledge metaphor	• Fits learning how to ride a bicycle metaphor
• Learning is teacher centered and controlled	• Learning is student centered and controlled
• "Live" teacher, "live" students required	• "Active" learner required, but not "live" teacher
• The classroom and learning are competitive and individualistic	• Learning environments and learning are cooperative, collaborative, and supportive
• Talent and ability are rare	• Talent and ability are abundant
Productivity/Funding	
• Definition of productivity: cost per hour of instruction per student	• Definition of productivity: cost per unit of learning per student
• Funding for hours of instruction	• Funding for learning outcomes
Nature of Roles	
• Faculty are primarily lecturers	• Faculty are primarily designers of learning methods and environments
• Faculty and students act independently and in isolation	• Faculty and students work in teams with each other and other staff
• Teachers classify and sort students	• Teachers develop every student's competencies and talents
• Staff serve/support faculty and the process of instruction	• All staff are educators who produce student learning and success
• Any expert can teach	• Empowering learning is challenging and complex
• Line governance; independent actors	• Shared governance; teamwork

Barr, R.B., & Tagg, J. (1995, Nov./Dec.). From teaching to learning: a new paradigm for undergraduate education. Change, 13-25.

APPENDIX G

Annotated Bibliography of Selected Sources

ANNOTATED BIBLIOGRAPHY of SELECTED SOURCES

ASSESSMENT AND COMPETENCY BASED EDUCATION

Internet Resources:

Borman, C. (1997, 11 November. University of Colorado at Boulder: Undergraduate Outcomes Assessment. [Online]. Available HTTP: http://www.Colorado.EDU/outcomes [1998, 12 February].
Report and results of the outcomes assessment program undertaken at the University of Colorado at Boulder beginning 1989-1990.

Coalition of Essential Schools. (1997, 5 June). Description. Coalition of Essential Schools at Brown University. [Online]. Available HTTP: http://www.ces.brown.edu [1998, 12 February].
Initial web site that gives general information about the Coalition of Essential Schools, a national school-university partnership, founded by Thomas R. Sizer, that assists and encourages the development of competency-based secondary schools. Site suggested by grant consultant, Tom Rusk Vickery.

Coalition of Essential Schools. Horace. Coalition of Essential Schools. [Online]. Available HTTP: http://www.ces.brown.edu [1998, 12 February].
HORACE, online journal of the Coalition of Essential Schools. Available under publications - HORACE.

Coalition of Essential Schools. Research. Coalition of Essential Schools. [Online]. Available HTTP: http://www.ces.brown.edu [1998, 12 February].
Online research publications of the Coalition of Essential Schools. Available under publications - research.

Drake, L. & Rudner, L. (1997, 19 December). Assessment and evaluation on the Internet. [Online]. Available HTTP: http:// ericae.net/intass.htm [1998, 12 February].
Pathfinder of web sites relevant to assessment and evaluation. Developed for the ERIC Clearinghouse on Assessment and Evaluation.

Rudner, L. (1996, 11 November). ERIC Clearinghouse on Assessment and Evaluation. [Online]. Available HTTP: http://ericae.net [1998, 12 February].
Homepage of ERIC Clearinghouse on Assessment and Evaluation at the Department of Education, Catholic University of America. This site leads to valuable web sites, bibliographies and FAQs.

University of North Carolina. (1998, 15 January). Internet resources for higher-education outcomes assessment. University of North Carolina: General Administration. [Online]. Available HTTP:http://www.ga.unc.edu/UNCGA/assessment/resources.html [1998, 16 March].

Connection to outcomes assessment sites on the web, including assessment pages of other institutions of higher education.

Books, articles and documents:

Aitken, J.E., & Neer, M. (1992, July). A faculty program of assessment for a college level competency-based curriculum. Communication Education, 41 (3), 270-86.

Describes assessment procedures that led to the design of a competency-based communication studies program at the university of Missouri- Kansas City.

Association for Computing Machinery, et.al(1997). IS '97: Model curriculum and guidelines for undergraduate degree programs in information system. Association of Information Technology Professionals.

A competency-based model curriculum by three prestigious professional organizations.

Banta, T.W., Lund, J.P., Black, K.E. & Oblander, F.W. (1996). Assessment in practice: Putting principles to work on college campuses. San Francisco: Jossey-Bass. (LB 2336.2 .A88 1996).

Describes and explains the nine "Principles of Good Practice for Assessing Student Learning" devised by the American Association for Higher Education and gives examples of assessment programs undertaken at major institutions.

Barr, R.B., & Tagg, J. (1995, Nov./Dec.). From teaching to learning: a new paradigm for undergraduate education. Change, 13-25.

Describes the new "learning paradigm" and contrasts it with the traditional "instruction paradigm.

Buerkel-Rothfuss, N., Gray, P.L., & Yerby, J. (1993, January). The structured model of competency-based instruction. Communication Education, 42 (1), 22-36.

Explains the use of a competency-based instructional model developed from the Personalized System of Instruction that is used in a basic communication courses.

Carrell, L.J. (1992, October). Issues in competency based assessment: An overview. (Report No. CS508094). Bloomington, IN: Reading and Communication Skills. (Eric Document Reproduction Service No. ED 354 573).

Survey of the issues surrounding minimum communication competencies that high school graduates should possess.

College of Business. Ball State University. (1996, June). Assessment materials.

Assessment package used at the Ball State University College of Business for preparation for curriculum assessment.

Cross, K.P. & Angelo, T. A. (1988, September) Classroom assessment techniques. (Report No. HE022212). Washington, D.C.: Higher Education. (Eric Document Reproduction Service No. ED 317 097).

Discusses and describes classroom assessment techniques that can be used by faculty. The three sections cover: assessment of academics skills; assessment of student's self-awareness as learners; and assessment of students reactions to teachers and teaching methods.

Denning, P.J. (1996, November-December). Business designs for the new university. Educom Review, 31 (6) 20-30.

Diamond, R.M. (1998) Designing and assessing courses and curricula. San Francisco: Jossey-Bass.

An influential book on curricula design and assessment.

Fiddler, M.B. (1994). Teaching to competence: enhancing the art of teaching (Adults). Journal of General Education, 43 (4), 289-303.

Examines the construction of a competency-based curriculum in a self directed program for working adults.

Fitt, D. X., & Heverley, M. (1994). Classroom assessment of student competencies. Assessment & Evaluation in Higher Education, 19 (3), 215-24.

Describes a model for assessing competencies in a college classroom that can be readily adapted to differing curriculum.

Gaither, G., Nedwek, B.P., & Neal, J.E. (1994) Measuring up: The promises an pitfalls of performance Indicators in Higher Education. ASHE-ERIC Higher Education Report No. 5 Washington, D.C.: The George Washington University, Graduate School of Education and Human Development. [LB 2806.2 .G34 1994].

Lengthy report that examines the development and implementation of performance indicators and reviews some of these indicators in institutions in the United States, and other countries.

Grant, G. (1979). On competence: a critical analysis of competence-based reform in higher education. San Francisco: Jossey-Bass.

An early FIPSE sponsored study on the competency movement in higher education.

Greenwood, A. (1993, May). National assessment of college student learning: Getting started. A summary of the beginning. (Report No. NCES-93-116). Washington, D.C.: National Center for Education Statistics. (Eric Document Reproduction Service No. ED 359 856)

Lengthy report that explores the issues and concerns related to the development of a process to assess college student learning. Divided into three chapters that address (1) a national assessment, (2) specific skills to be assessed and (3) gives standards and measurement issues.

Hager, P. and others. (1994). General issues about assessment of competence. Assessment and evaluation in Higher Education. 19 (1), 3-16.

Gives pros and cons of competency-based assessment in higher education.

Halonen, J.S. (1995, February) Demystifying critical thinking. Teaching of Psychology, 22 (1) 75-81.
Describes a design for a performance based curriculum in psychology. Attempts to define and demystify critical thinking.

Harrison, A.F. (1992). An assessment tool for teachers and students: Harrison's instructional design. (Report No. SP034027). Washington, D.C.: Teaching and Teacher Education. (Eric Document Reproductions No. ED 350 266).
Manual that explains the author's instructional design technique.

Hutchings, P., Marchese, T. & Wright, B. (1991). Using assessment to strengthen general education. Washington, D.C.: American Association for Higher Education.

Laurence, D.(1994,Fall). From the Editor column. ADE Bulletin. 108, 1-4.
Review of a FIPSE supported project that brought together faculty from 29 college or university English departments to review their curriculum.

Moore, W.S. (1990, June). Beyond content: Reframing questions of student learning. (Report No. HE023822). Washington, D.C.: Higher Education. (Eric Document Reproductions No. ED 322 867).
Examines the aim of colleges in terms of outcomes assessment. Worksheets are included for designing an assessment project.

Morreale, S.P., Whitney, P., Zautke, B., Ellis, K., McCormick, K., & Witter, S. (1992, October). The center for excellence in oral communication: A comprehensive program for assessing the development of public speaking competency. (Report No. CS507993). Bloomington, IN: Reading and Communication Skills. (Eric Document Reproductions No. ED 350 642).
Describes the comprehensive assessment of a basic public speaking course at the University of Colorado at Colorado Springs.

Oklahoma State Regents for Higher Education. (1993, April). Student competencies for college success. (Report No. HE027045). Washington, D.C.: Higher Education. (Eric Document Reproductions No. ED 365 252).
Details basic college entry competencies in language arts, mathematics, science and history for Oklahoma high school graduates. Developed by Oklahoma university system faculty.

Proctor, J., Powney, J. (1991, Summer). The standard of qualification in management education: unresolved questions. Higher Education Review, 23 (3), 31-40.
Raises questions regarding the development of competency standards for management education.

Shaughnessy, M.F. (1995). Delivery of the knowledge curriculum vs. skill and competency curriculum. (Report No. HE028399). Washington, D.C.: Higher Education. (Eric Document Reproductions No. ED 384 286).
Describes the "knowledge delivery" system of education and argues that competencies are not developed via this system.

Spicer, K., Hanks, W.E. (1995, November). Multiple measures of critical thinking skills and predisposition in assessment of critical thinking. (Report No. CS509116). Bloomington, IN.: Reading and Communication Skills. (Eric Document Reproductions No. ED 391 105).

Describes different methods to determine critical thinking skills. States that college educators must be clear on the intended results and must decide what students should be able to demonstrate before they decide what they must teach.

Stark, J.S., & Lowther, A. (1989 Winter). Exploring common ground in liberal and professional education. In Armour, R.A., & Fuhrmann, B.S. (eds.) New Directions for Teaching and Learning. No. 40. (pp 7-20). San Francisco: Jossey-Bass.

Describes new educational approaches to integrate professional and liberal studies. Competency underpinnings are explored.

Weingarter, R.H. (1994, Winter). Between cup & lip: reconceptualizing education as students learning. Educational Record, 75 (1), 13-19.

Argues that the college environment must change to allow students to gain competencies.

Womble, M.N. (1993, Spring). Assessment of competencies for computer information systems curricula, Delta Pi Epsilon Journal, 35 (2), 69-85.

Survey of entry level computer professionals and managers regarding competencies identified in Association for Computing Machinery curricula.

COMPETENCY AND BUSINESS

Books, articles and documents:

Boyatzis, R.E. (1982). The competent manager: A model for effective performance. NY: Wiley.

Competency definition.

Boyatzis, R.E., Cowen, S.S., & Kolb, D.A. (1995, Spring). A learning perspective on executive education. Selections. 11 (3), 47-55.

A description of the changes taking place in the theory and practice of management education.

Curtis, D.B., Winsor, J.L. & Stephens, R.D. (1995, April). National preferences in business and communication education, II. (Report No. CS509101). Bloomington, IN: Reading and Communication Skills. (Eric Document Reproductions No. ED 390 085).

Results of a survey asking what criteria business managers consider when hiring college graduates. The most important determinants are basic competencies in written and oral communication.

Diamond, R.M. (1997, August 1) Broad curriculum reform is needed if students are to master core skills. The Chronicle of Higher Education, 50 (47), B7.

The title is the conclusion of a cogent and persuasive argument.

Down, K.O., Liedlka, J. (1994, Winter). What corporations seek in MBA hires: A survey. Selections, 10 (2), 34-39.

Study that relates the outcome of a survey of corporate recruiters that identifies that the 3 most important skills required of MBA graduates were communications skills, interpersonal skills and self-motivation/initiative.

Illinois MBA Today, 1 (1), whole issue.

Premier issue of the publication of the College of Commerce and Business Administration at the University of Illinois at Urbana-Champaign that describes their new outcome-based curriculum.

Kaufman, B.E. (1994, September). What companies want from HR graduates. HRMagazine, 39 (9), 84-86.

As a Human Resource program director at a large university, the author interviewed corporate HR professionals and claims the following skills are desirable in recent graduates - demonstrated leadership qualities excellent communication and interpersonal skills, good technological skills, knowledge of cultural differences and knowledge of basic business fundamentals.

Leadership competencies. (1995, January-February). Journal of Business Strategy, 16 (1), 58-60.

Survey that asked executives from 12 global companies to define the competencies critical for leadership effectiveness. Among the top ten were the ability to articulate a corporate vision, to serve as a manager of change and to be able to communicate effectively.

Leith, S., Kovacheff, J. & Price, C. (1994, Winter). Re-engineering the MBA in Canada. Canadian Business Review, 21 (4), 32.

The author looks at reasons for the dwindling enrollment in Canadian MBA programs and cites components of successful schools in Canada and the United States.

Marquardt, M.J. & Engel, D.W. (1993, May). HRD competencies for a shrinking world. Training & Development, [Online], 47 (5), 70 paragraphs. Available HTTP: http/www.searchbank.com /searchbank/nhc_main [1996, 20 August].

The author identifies sixteen competencies that are critical for Human Resource professionals to succeed in a global economy.

Neuhauser, C. L. & Smith, B.J. (1996). International business competencies required for all business school graduates. Journal of Teaching in International Business, 8 (1), 79-102

Competencies in 50 international business areas were ranked and validated by administrators and faculty from leading business schools.*

Tokar, B.l. & Brown, R.D. (1996). Competencies for International Financial Management (IFM). Journal of Teaching in International Business, 8 (2), 41-56

Competencies that were necessary at the master's level in IFM were identified from the analysis of eight textbooks.*

Warner, K.K. (1995, December) Business communication competencies needed by employees as perceived by business faculty and business professionals. Business Communication Quarterly, 58 (4), 51-56.

A study undertaken to determine if competencies in business writing, interpersonal communication, basic English and other business communication were perceived of equal importance by business faculty and business professionals.

CONTINUOUS QUALITY IMPROVEMENT:

Internet Resources:

Kimbler, D.L. (1995, 14 June). Continuous quality improvement (CQI) server. [Online]. Available HTTP: http://deming.eng.clemson.edu/ [1996, 26 October].

Homepage of the CQI server at the Department of Industrial Engineering, Clemson University that details the department's efforts at quality improvement and provides an extensive listing of files that can be downloaded.

Ferris State University Quality Network. (1998, 01 March). TQM at Ferris State University. [Online]. Available HTTP:http://www.ferris.edu/htmls/connect/tqm/TQMATFER.HTM [1998, 16 March].

An annotated list of the major Total Quality Management (TQM) and Continuous Quality Improvement (CQI) world-wide-web sites

Books, articles and documents:

American Association for Higher Education. (1994). 25 Snapshots of a movement: Profiles of campuses implementing CQI. (Report No. HE028036). Washington, D.C.: Higher Education. (Eric Document Reproduction No. ED 378 887).

Describes examples of Continuous Quality Improvement programs undertaken at 25 institutions of higher education.

Bellamy, L., Evans, D., Linder, D., Mcneill, B. & Raupp. G. (1994, March). Teams in Engineering Education. (Report No. HE028427). Washington, D.C.: Higher Education. (Eric Document Reproduction Service No. ED 384 315).

Reviews the need for teams in engineering education and shows how teams can improve the quality of education. Includes a workshop manual that focuses on: (1) techniques for forming teams, (2) results of team decision making and (3) team-building exercises.

Bonwell, C.C. & Eison, J.A. (1991). Active learning: creating excitement in the classroom. (Report No. HE024886). Washington, D.C.: Higher Education. (Eric Document Reproduction Service No. ED 336 049).

Examines and reviews the literature on active learning in higher education. Discusses the barriers established by faculty and gives ideas on how faculty can implement active learning.

Brigham, S. & Carusone, D.D. (1996). Roadmap to resources: Sources and tools for CQI implementation. (Report No. HE 029 199). Washington, D.C.: Higher Education. (Eric Document Reproduction Service no. ED 398 772).

Bibliography of print, non-print and organizational resources developed to assist colleges and universities in their Continuos Quality Improvement efforts.

Chaffee, E.E. & Sherr, L.A. (1992). Quality: Transforming postsecondary education. (Report No. HE025980). Washington, D.C.: Higher Education. ,(Eric Document Reproduction Service No. ED 351 922).

Examines what quality is and what tools and systems are required to improve quality. An appendix list the criteria for the 1992 Malcolm Baldridge National Quality Award.

Davis, L.J. (1993, Fall). Teaching university students how to learn. Improving College and University Teaching, 31 (4), 160-65.

Focuses on teaching students the strategies necessary for learning.

Davis, R. H. & Alexander, L.T. (1977a). The lecture method. In Guides for the improvement of instruction in higher education. No. 5. East Lansing: Michigan State University.

This unit focuses on the lecture method and is designed to assist the instructor in deciding when to evaluate instruction methods, for what purposes and how to collect data.

Derlin, R., Solis, E., Aragon-Campos, T. & Montoya, N. (1996, February) An academic departments response to outcomes assessment. (Report no. HE 029 600). Washington, D.C.: Higher Education. (Eric Document Reproduction Service No. ED 400 760).

Paper presented at New Mexico Higher Education Assessment Conference that describes the faculty response to outcomes assessment at New Mexico State University.*

Dolence, M.G. & Norris, D.M. (1994, Summer). Using key performance indicators to drive strategic decision making. In Victor, M. (ed) New Directions for Institutional Research. No. 82. (pp 63-80). San Francisco: Jossey-Bass.

Description of the nine-step assessment project undertaken at the University of Northern Colorado and Illinois Benedictine College

Dolence, M.G. & Norris, D.M. (1995). Transforming higher education: A vision for learning in the 21st century. Ann Arbor, MI.: Society for College and University Planning.

Dooris, M.J., & Teeter, D.J. (1994). Total quality management perspective on assessing institutional performance. In Victor, M. (ed) New Directions for Institutional Research. No. 82. (pp 51-62). San Francisco : Jossey-Bass.

Examines various methods used at Pennsylvania State University to monitor the quality and effectiveness of instruction.

Gardiner, L.F. (1994). Redesigning higher education: Producing dramatic gains in student learning. ASHE_ERIC Higher Education Report No. 7. Washington, D.C.: Graduate School of Education and Human Development, The George Washington University.

Discusses and explains critical thinking skills and reviews studies on the effectiveness of instruction in higher education and the development of these skills in relation to curriculum, instruction, campus psychological climate and academic advising.

Gentemann, K.M., Fletcher, J.J., & Potter, D.L. (1994 Winter). Refocusing the academic program review on student learning: the role of Assessment. In Kinnick, M.K. (ed.) New Directions for Institutional Research. No. 84. (pp 31-46). San Francisco : Jossey-Bass.

Proposes to focus on student learning to support the role of colleges and universities as learning-centered communities.

McNeill, B.W. & Bellamy, L. (1994). Curriculum development, design, specification and assessment and supplemental materials. (Report No. HE028425). Washington, D.C.: Higher Education. (Eric Document Reproduction Service No. ED 384 312).

Proceedings of a workshop on curriculum development, design, specification, and assessment in engineering.

Moore, N. (1996, May). Using the Malcolm Baldridge criteria to improve quality in Higher Education. (Report No. HE 029 555) Washington, D.C. : Higher Education. (Eric Document Reproduction Service No. ED 399 919).

Explains the 11 core values of the Malcolm Baldridge Criteria for Quality Improvement and demonstrates the use of the criteria at San Juan College in New Mexico.*

Satterlee, B. (1996, September). Continuous improvement and quality: Implications for higher education. (Report No. HE 029 440) Washington, D.C. : Higher Education. (Eric Document Reproduction Service No. ED 399 845)

Reviews the literature of Total Quality Management and applies the theory to institutions of higher education. Recommends that institutions must define a concept of quality, recognize the 4 TQM assumptions, use cross-functional teams, use a conceptual framework and empower the executive leadership*

Wolverton, M. (1994). A new alliance: Continuous quality and classroom effectiveness. Ashe-Eric Higher Education Report No. 6. Washington, D.C.: The George Washington University, School of Education and Human Development.

Introduces general principles of Total Quality Management (TQI) and explains the transition from TQI in colleges administration to Continuous quality improvement (CQI) in the classroom. Reports on six institutions of higher education and the use of CQI to improve classroom effectiveness.

MODULAR INSTRUCTION

Books, articles and documents:

Dec, F.J.R.C., Wagemans, L.J.J.M., & deWolf, N.C. (1989). Modularisation and student learning in modular instruction in relation with prior knowledge. (Report No. SP036183). Washington, D.C.: Teacher Education. (Eric Document Reproductions No. ED 386 434).

Describes the development of modular instruction , its use at the Dutch Open University and the advantages and disadvantages of this educational format.

TECHNOLOGY AND LEARNING

Internet Resources:

Institute for Academic Technology. (1996). The institute for academic technology. [Online]. Available HTTP: http://www.iat.unc.edu/ (1996, 4 November).

Homepage of the Institute situated at The University of North Carolina at Chapel Hill and "dedicated to the proposition that information technology can be a valuable tool for improving the quality of student learning."

Stinson, J.E. & Milter, R.G. (1995, 4 October). The enabling impact of information technology: The case of the Ohio University MBA. [Online]. Available HTTP: http://www.cscl95.indiana.edu /cscl95/stinson.html [1996, 25 August].

Describes how technology is used to deliver the Ohio University MBA at three separate sites.

Books, articles and documents:

Bergeron, B.P. (1996, Spring). Competency as a paradigm for technology-enabled instruction and evaluation. Journal of Instructional Delivery Systems, 10 (2) 22-24.

The need to identify competencies is necessary to match educational objectives with appropriate technological methods.*

Chizmar, J.F. & Williams, D.B. (1996, Fall). Altering time and space through network technologies to enhance learning. CAUSE/EFFECT, 19 (3) 14-21.

Examples that demonstrate how advances in technology can alter limitations of time and space during instruction.*

Fischer, M.J. (1996). Integrated learning systems: An application linking human factors and pedagogical principles. Educational Technology Research and Development, 44 (3) 65-72.

Describes the application of an integrated learning systems (ILS) that takes into account learning theory research, principles of instructional design and other factors related to human learning.*

Eldred, J. (1994). Distance management education: Process and evaluation of course design, manager support and media. (Report No. IR017390). Syracuse, N.Y.: Information Resources. (Eric Document Reproductions No. ED 388 241).

Paper discusses the three issues relating to offering a management course via distance education - the educational design issues that need to be faced; the ways computers, e-mail and networks can be improved; and the issues involved in the introduction of multimedia and hypermedia systems into distance education.

Ehrmann, S.G. (1995, September-October). New technology, old trap. Educom Review, 30 (5), 41-43.

Proposes the idea that traditional teaching methods must not be carried over into distance education.

Jonassen, D.H. (1995, July-August). Supporting communities of learners with technology: A vision for integrating technology with learning schools. Educational Technology, 35 (4), 60-63.
Considers how technology can create communities of learners and how to support meaningful learning with technologies.

Lopez, E.S. & Nagelhout, E. (1995, June). Building a model for distance collaboration in the computer-assisted business communication classroom. Business Communication Quarterly, 58 (2), 15-20.
Reports on a model to teach collaborative business writing, problem solving and the contextual nature of cases that takes advantage of network technology.

McHenry, L. & Bozik, M. (1995, April). Communicating at a distance: A study of interaction in a distance education classroom. (Report No. CS509062). Bloomington, IN: Reading and Communications Skills. (Eric Document Reproductions No. ED 387 849) [Library Eric Document Fiche Collection].
Examines the use of Iowa's fiber-optic telecommunications network to offer live, interactive television instruction.

Pellegrino, J.W. (1995, February.). Technology in support of critical thinking. Teaching of Psychology, 22(1), 11-12. [Reserve].
Technology is playing a vital role in helping students develop the skills to think clearly about complex issues and solve a wide range of problems.

Rankin, R. (1995). The impact of technology on undergraduate business education preparation programs: A model. In Gronema, N.E. (ed.), Technology in the classroom: National Business Education Association Yearbook, No. 33. (pp 25-31). Reston, VA: National Business Education Association. [Reserve].
Describes a model undergraduates program in business education designed to prepare graduates with the ability to use and evaluate current and emerging technology in teaching.

Schmidt, B.J. & Kirby, M.S. (1995). Technology and the development of critical thinking skills. In Gronema, N.E., (ed.) Technology in the classroom: National Business Education Association Yearbook, No. 33. (pp 32-39). Reston, VA: National Business Education Association. [Reserve].
Higher order or critical thinking skills are necessary in today's world. The authors give six examples of instructional strategies using computer technology that can help students develop higher order thinking.

Sherry, L. (1996, October). Supporting a networked community of learners. TechTrends, 41 (5) 28-32.
Description of project to design a networked learner support system by graduate students in the University of Colorado at Denver's School of Education.*

Wilson, J.M. & Mosher, D.N. (1994). Interactive multimedia distance learning (IMDL): The prototype of the virtual classroom. (Report No. IR017452). Syracuse, N.Y.: Information Resources. (Eric Document Reproductions No. ED 388 303).
Explains the interactive Multimedia Distance learning project between RPI and AT&T and the designing of a "Virtual Classroom" that combines video teleconferencing with real time, synchronous data communication to teach a course in AT&T's University of Sales Excellence.

*Annotations taken from ERIC Abstracts

Compiled 1/22/97 by: Carol West, Network Librarian
Shapiro Library, New Hampshire College
[updated by West and Seidman on 3/25/98]

APPENDIX H

Existing Course Data Collections Forms

Common Professional Component Course Analysis
Liberal Arts Component Analysis
General Education Competencies Analysis

TABLE 3

NHC 3-YEAR DEGREE DATA COLLECTION SHEET (For Courses that Appear on the Business Administration Worksheet)

GENERAL EDUCATION COMPETENCIES

COURSE NO: _____ COURSE TITLE: _____ Prepared by: _____ Date: _____

COURSE TOPICS	Areas of Competance/Knowledge: GROUP ORGANIZATIONAL SKILLS	LEADERSHIP SKILLS	ORAL COMMUNICATION/ PRESENTATION SKILLS	WRITTEN COMMUNICATION	READING COMPETENCE	RESEARCH	PROBLEM ANALYSIS	DECISION MAKING	COMPUTER APPLICATIONS	EFFECTIVE GROUP MEMBER	CREATIVE AND INNOVATIVE THINKING	CIVIC RESPONSIBILITY	AESTHETIC APPRECIATION	THEORETICAL COMPETENCE	MULTI-CULTURAL SENSITIVITY	OTHER	OTHER	OTHER

H - High Emphasis Area - Crucial to the nature of the course
M - Moderate Emphasis Area - A topic area that requires substantial attention in the delivery of course content
L - Low Emphasis Area - A topic area that has a minimal relationship in the overall impact of the course on the student

I - This course Initiates the skill or knowledge critical to the achievement of the general education component.
F - This course establishes the Foundation upon which the skill or knowledge is achieved.
R - This course Reinforces the skill or knowledge, important to the achievement of the general education component.

Directions:

1) List in the left hand column the significant topics that are covered in the course. The sample collection sheet for ADB 125 may be useful to review at this point.
2) For each course topic listed, indicate to the degree that the topic emphasizes (if at all) the areas of competance/ knowledge that appear across the top of this table. Add competence/knowledge under Other if you wish.
3) As you place a L, M, or H in the appropriate box, please also indicate (as demonstrated on the sample worksheet) whether this course topic (skill or knowledge) is Initiated, Reinforced or establishes the Foundation in the class. Simply place an "I", "F", or an "R" after your rating of L, M, or H.
4) We invite you to share with the Grant Team any comments that you may have regarding this course and or table. Please use the back of this table for your written comments.

For assistance in completing this form, please contact Marty Bradley either by phone, x2135, or email, bradlema.

Due Date: May 6, 1996 Send to: Marty Bradley

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TABLE 1

NHC 3-YEAR DEGREE DATA COLLECTION SHEET (For Courses that Appear on the Business Administration Worksheet)

COMMON PROFESSIONAL COMPONENT COURSE ANALYSIS

COURSE NO: _____ COURSE TITLE: _____ Prepared by: _____ Date: _____

	Areas of Competence/Knowledge																	
COURSE TOPICS	PRODUCTION/ OPERATIONS	MARKETING	BUSINESS FINANCE	LEGAL ENVIRONMENT	ECONOMICS	BUSINESS ETHICS	ACCOUNTING	CIS/ MIS	QUANT./ STAT.	MANAGEMENT (TQM)	ORG. BEHAVIOR	HUMAN RESOURCES	STRATEGIC MGT.	INTEGRATING EXPERIENCE*	GLOBAL DIMENSION	INTRA- / INTER-PERSONAL EFFECTIVENESS	OTHER	OTHER

H - High Emphasis Area - Crucial to the nature of the course.
M - Moderate Emphasis Area - A topic area that requires substantial attention in the delivery of course content.
L - Low Emphasis Area - A topic area that has a minimal relationship in the overall impact of the course on the student.

I - This course initiates the skill or knowledge critical to the achievement of the common professional component.
F - This course establishes the Foundation upon which the skill or knowledge is achieved.
R - This course Reinforces the skill or knowledge, important to the achievement of the common professional component.

*Integrating Experiences - Those experiences that help the student to integrate and synthesize two or more topics simultaneously.

Directions:

1) List in the left hand column the significant topics that are covered in the course. The sample collection sheet for ADB 125 may be useful to review at this point.
2) For each course topic listed, indicate to the degree that the topic emphasizes (if at all) the areas of competence/ knowledge that appear across the top of this table. Add competence/knowledge under Other if you wish.
3) As you place a L, M, or H in the appropriate box, please also indicate (as demonstrated on the sample worksheet) whether this course topic (skill or knowledge) is Initiated, Reinforced or establishes the Foundation in the class. Simply place an "I", "F", or an "R" after your rating of L, M, or H.
4) We invite you to share with the Grant Team any comments that you may have regarding this course and or table. Please use the back of this table for your written comments.

For assistance in completing this form, please contact Marty Bradley either by phone, x2135, or email, bradlema.

Due Date: May 6, 1996 Send to: Marty Bradley

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TABLE 2

NHC 3-YEAR DEGREE DATA COLLECTION SHEET (For Courses that Appear on the Business Administration Worksheet)

LIBERAL ARTS COMPONENT

COURSE NO: _____ COURSE TITLE: _____ Prepared by: _____ Date: _____

	Areas of Competence/Knowledge																	
	COMMUNICATION SKILLS			REASONING		CRITICAL	UNDERSTANDING OF CONCEPTS						KNOWLEDGE AND APPRECIATION		COMPUTER	LIFELONG		
COURSE TOPICS	WRITING	RESEARCH	ORAL	SCIENTIFIC	QUANTITATIVE	THINKING	SCIENTIFIC	HISTORICAL	SOCIAL	POLITICAL	PHILOSOPHICAL	PSYCHOLOGICAL	AESTHETIC	ETHICAL DIMENSIONS OF HUMANKIND	USE	LEARNING	OTHER	OTHER

H - High Emphasis Area - Crucial to the nature of the course.
M - Moderate Emphasis Area - A topic area that requires substantial attention in the delivery of course content.
L - Low Emphasis Area - A topic area that has a minimal relationship in the overall impact of the course on the student.

I - This course initiates the skill or knowledge critical to the achievement of the liberal arts component.
F - This course establishes the Foundation upon which the skill or knowledge is achieved.
R - This course Reinforces the skill or knowledge, important to the achievement of the liberal arts component.

Directions:

1) List in the left hand column the significant topics that are covered in the course. The sample collection sheet for ADB 125 may be useful to review at this point.
2) For each course topic listed, indicate to the degree that the topic emphasizes (if at all) the areas of competence/ knowledge that appear across the top of this table. Add competence/knowledge under Other if you wish.
3) As you place a L, M, or H in the appropriate box, please also indicate (as demonstrated on the sample worksheet) whether this course topic (skill or knowledge) is Initiated, Rainforced or establishes the Foundation in the class. Simply place an "I", "F", or an "R" after your rating of L, M. or H.
4) We invite you to share with the Grant Team any comments that you may have regarding this course and or table. Please use the back of this table for your written comments.

For assistance in completing this form, please contact Marty Bradley either by phone, x2135, or email, bradlema.

Due Date: May 6, 1996 Send to: Marty Bradley

APPENDIX I

Sample Meta-analysis Grids

Common Professional Component Course Analysis
Liberal Arts Component Analysis
General Education Competencies Analysis

Explanation of the Common Professional Component Meta-Analysis Grid

The meta-analysis represents the next level of interpretation of the data as submitted by the faculty who teach required courses that appear on the 1995/96 Business Administration worksheet.

As you review this grid, please note that the topics in the far left column marked "Component" represent a competency that appeared on the original data collection sheet completed by faculty. The column marked "# of Courses Contributing" indicates the total number of courses in which a particular component is discussed. In the illustration below, you will note that Topic #1 is discussed in ten of the eighteen business classes required in the B.A. major. Of those ten courses, the column marked "Total # of I/F/R" indicates that the topic is Initiated six times, is Foundational zero times and is Reinforced four times. The remaining columns illustrate the "course level" (100, 200, 300, or 400) in which these I/F/R actions are occurring. Of the six initiating experiences for Topic #1 three occur in 100 level courses and the remaining three occur in 200 level courses. Next, we see that there are no foundational experiences for students, and finally, of the four reinforcing experiences, two occur in 200 level courses and two occur in 300 level courses.

Please note that the data is presented in exactly the same manner for the Liberal Arts meta-analysis and the General Education meta-analysis.

I - This course Initiates the skill or knowledge critical to the achievement of the common professional component.
F - This course establishes the Foundation upon which the skill or knowledge is achieved.
R - This course Reinforces the skill or knowledge, important to the achievement of the common professional component.

COMPONENT	# OF COURSES CONTRIBUTING	TOTAL # OF I/F/R	No. of I, F, R by course level (Freshmen-100, Sophomore-200, Junior-300, Senior-400)											
			I &100	I &200	I&300	I&400	F&100	F&200	F&300	F&400	R&100	R&200	R&300	R&400
Topic #1	10 of 18	I=6, F=0, R=4	3	3	0	0	0	0	0	0	0	2	2	0
Topic #2	9 of 18	I=4, F=1, R=5	1	3	0	0	1	0	0	0	0	0	4	1
Topic #3	11 of 18	I=5, F=2, R=4	1	3	1	0	2	0	0	0	0	0	3	1

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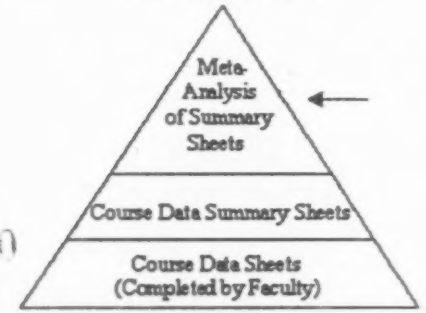

Explanation of the Liberal Arts Meta-Analysis Grid

The meta-analysis represents the next level of interpretation of the data as submitted by the faculty who teach required courses that appear on the 1995/96 Business Administration worksheet.

As you review this grid, please note that the topics in the far left column marked "Component" represent a competency that appeared on the original data collection sheet completed by faculty (as an example, see below the column that lists Topic #1

The column marked "# of Courses Contributing" indicates the total number of courses in which a particular component is discussed. In the illustration below, you will note that the topic of writing is discussed in 13 of the 17 classes required in the B.A. major. Of those 13 courses, the column marked "Total # of I/F/R" indicates that the topic is Initiated six times, is Foundational two times and is Reinforced seven times. The remaining columns illustrate the "course level" (100, 200, 300, or 400) in which these I/F/R actions are occurring. Of the six initiating experiences for Top. #1 three occur in 100 level courses and the remaining three occur in 200 level courses. Next, we see that there are two foundational experiences for students, and finally, of the seven reinforcing experiences, five occur in 100 level courses and two occur in 200 level courses.

Please note that the data is presented in exactly the same manner for the Common Professional Component meta-analysis and the General Education meta-analysis.

I - This course Initiates the skill or knowledge critical to the achievement of the liberal arts component.
F - This course establishes the Foundation upon which the skill or knowledge is achieved.
R - This course Reinforces the skill or knowledge, important to the achievement of the liberal arts component.

COMPONENT	# OF COURSES CONTRIBUTING	TOTAL # OF I/F/R	No. of I, F, R by course level (Freshmen-100, Sophomore-200, Junior-300, Senior-400)											
			I &100	I &200	I&300	I&400	F&100	F&200	F&300	F&400	R&100	R&200	R&300	R&400
Topic #1	13 of 17	I=6, F=2, R=7	3	3	0	0	1	1	0	0	5	2	0	0
Topic #2	15 of 17	I=11, F=0, R=5	8	3	0	0	0	0	0	0	0	3	2	0
Topic #3	6 of 17	I=6, F=0, R=1	4	2	0	0	0	0	0	0	1	0	0	0

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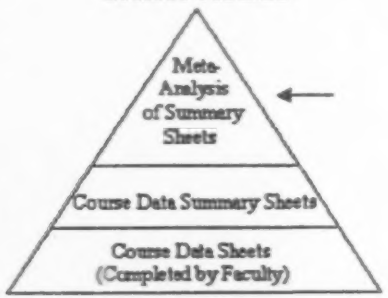

Explanation of the General Education Meta-Analysis Grid

The meta-analysis represents the next level of interpretation of the data as submitted by the faculty who teach required courses that appear on the 1995/96 Business Administration worksheet.

As you review this grid, please note that the topics in the far left column marked "Component" represent a competency that appeared on the original general education collection sheet completed by faculty. The column marked "# of Courses Contributing" indicates the total number of courses in which a particular component is discussed. In the illustration below, you will note that the topic of Topic #1 is discussed in 12 of the 35 classes required in the B.A. major. Of those 12 courses, the column marked "Total # of I/F/R" indicates that the topic is Initiated five times, is Foundational three times and is Reinforced five times. The remaining columns illustrate the "course level" (100, 200, 300, or 400) in which these I/F/R actions are occurring. Of the five initiating experiences for Topic #1, four occur in 100 level courses and the remaining one occurs in a 200 level course. Next, we see that there are two foundational experiences occurring in a 100 level course and the remaining one in a 300 level course. Finally, of the five reinforcing experiences, one occurs in each of the 100 and 200 level courses, three occur in 300 level courses, and one occurs in a 400 level course.

Please note that the data is presented in exactly the same manner for the Common Professional Component meta-analysis and the Liberal Arts meta-analysis.

I - This course Initiates the skill or knowledge critical to the achievement of the liberal arts component.
F - This course establishes the Foundation upon which the skill or knowledge is achieved.
R - This course Reinforces the skill or knowledge, important to the achievement of the liberal arts component.

COMPONENT	# OF COURSES CONTRIBUTING	TOTAL # OF I/F/R	No. of I, F, R by course level (Freshmen-100, Sophomore-200, Junior-300, Senior-400)											
			I &100	I &200	I&300	I&400	F&100	F&200	F&300	F&400	R&100	R&200	R&300	R&400
Topic #1	12 of 35	I=5, F=3, R=5	4	1	0	0	2	0	1	0	1	1	3	1
Topic #2	7 of 35	I=4, F=0, R=3	3	1	0	0	0	0	0	0	0	1	1	1
Topic #3	13 of 35	I=7, F=0, R=6	5	2	0	0	0	0	0	0	1	2	2	1

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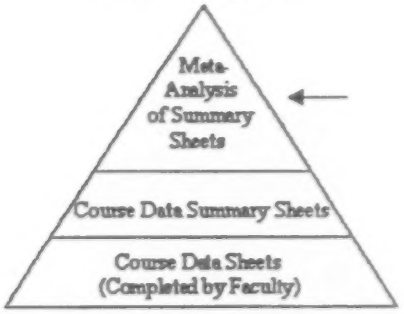
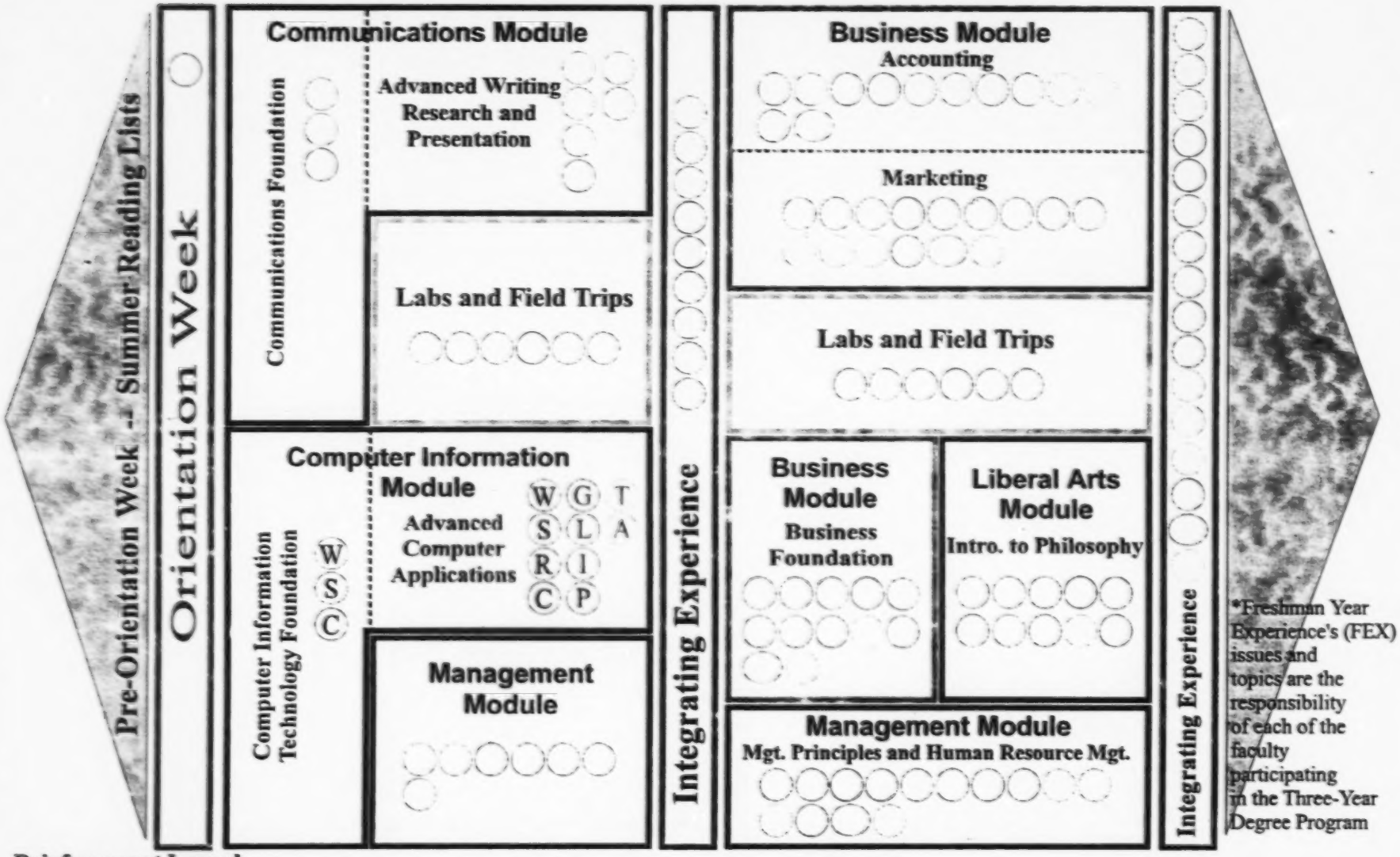


APPENDIX J

Year One Competency Reinforcement Plan
Year One Three-Credit Course Equivalent Underlay
for
Computer Information Technology Module

Year 1 Competency Reinforcement Plan

Assessment of student progress and the program will be conducted throughout.



Reinforcement Legend

W Writing	C Computer	L Org-Leadership	T Business Trends	Lw Law	St Strategic Mgt
S Speaking	Q Quant./Qual.	I Interpersonal Skills	IP Int'l Perspective		M Marketing
R Research	G Group Member	P Problem Solving	E Ethics		A Accounting

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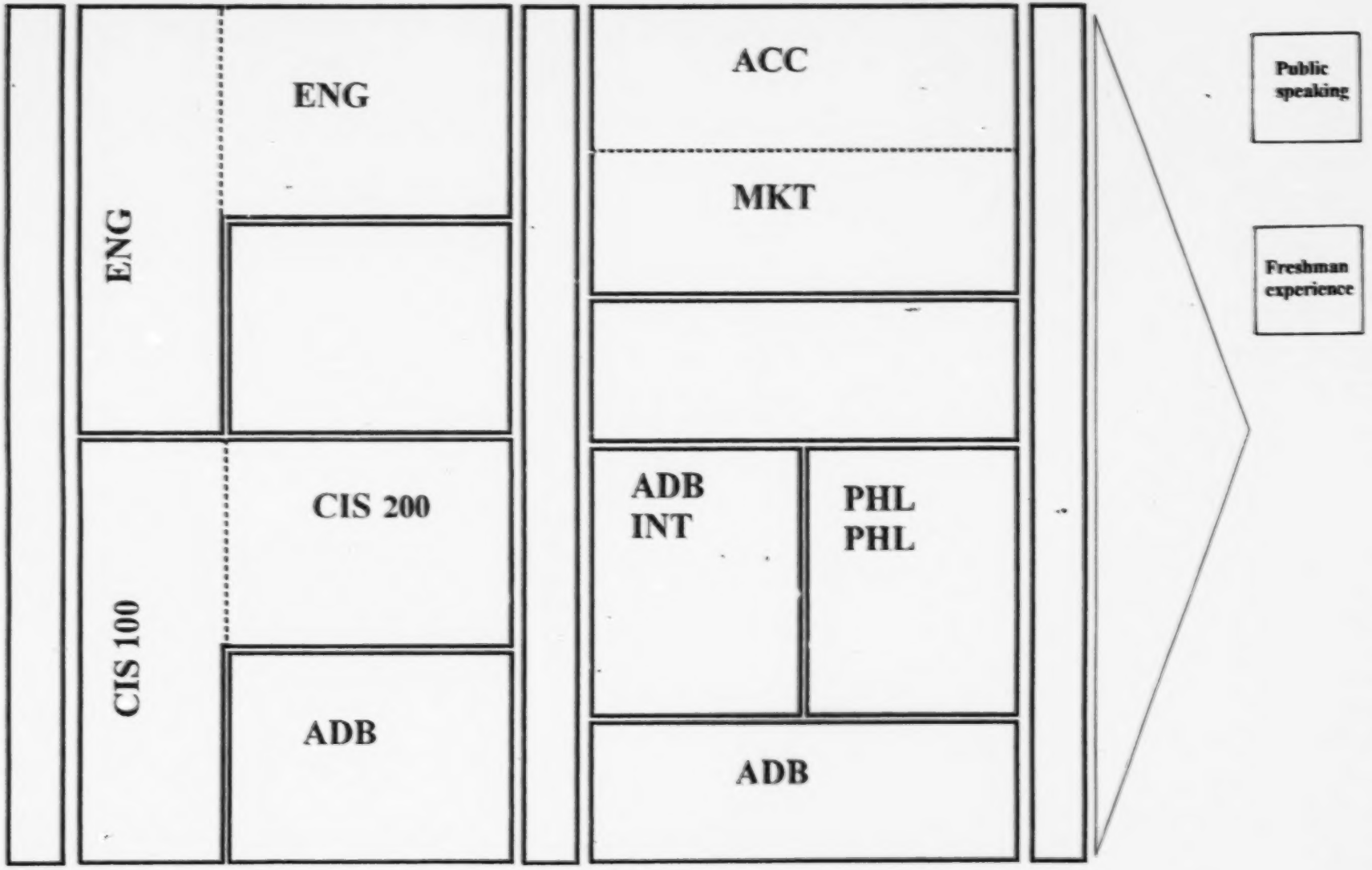
Year 1: Three-Credit Course Equivalent Underlay

This underlay shows the current courses from which the first year was developed



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APPENDIX K

Web Site

Innovative Program Features

Academics	Distance Ed
Administration	Library
Admission	News & Events
Alumni	Search
Athletics	Student Life
Campus	Welcome

Challenge yourself at New Hampshire College by applying for the 3-Year Degree Program.

EDUCATIONAL INNOVATION AT ITS BEST
This program, which is the result of a comprehensive, research-based assessment of our existing program, was designed from "the ground up" as a custom, three-year academic experience. It is not a "rescheduling" or compression of our four-year program.

120 CREDITS / 6 SEMESTERS
Three-year degree students earn the same number of academic credits (120) as students in a conventional four-year degree program. Students attend college for two 15-week semesters each year for three years from early September until early May.

COMPETENCY-BASED
The three-year program is a highly integrated academic experience designed to achieve proficiency in thirteen competencies. These competencies are achieved as students participate in a series of intentionally designed interdisciplinary and cross-curricular modules. Foundations for the competencies are laid in the first year and are built upon and reinforced in years two and three. These development and reinforcement activities occur at varying levels of intensity depending on the nature of the knowledge and skills being acquired in a particular module.

THE PROGRAM FEATURES:
- Integration of computer information technology;
- Emphasis on team teaching;
- Emphasis on thirteen competencies essential for success in business;
- Combining hands-on business experience at external sites throughout the program;
- Interdisciplinary approach to learning;
- Plus, save 25% of the total cost of your education.

INTEGRATING EXPERIENCE

Instructors are enthusiastic, supportive, and committed to the objectives of this program and work together on a regular basis to coordinate and integrate learning experiences and activities between and among all academic experiences. A week-long integrating experience at the end of each semester helps students see the relevance of their learning and serves as a vehicle for competency development.

TOTAL COLLEGE EXPERIENCE

As a student in the three-year academic program you have the ability to participate in the total college experience. New Hampshire College has 12 NCAA Division II athletic programs, and more than 40 student clubs, activities and intramural sports in which to take part. You can also choose to work at an on-campus job, attend student activities events or play in a pick-up game in the gym. It is all possible at New Hampshire College!

Revised March 26, 1998
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Send comments to webmaster@nhc.edu

New Hampshire College Web Site
http://www.nhc.edu

Three Year Degree Program Web Site
http://www.nhc.edu/threeyr/